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- The State and the Medical
The Care of Mental Defectives in New
The Problem of Epilepsy in New
Clinical Differentiation of the Functional
Mental Disorders
The Psychology of Myths
Malaria Treatment of Schizophrenia
Epileptics in Institutions in the U.
Congenital Word Blindness: A
Investigation of the Oedipus Complex
in Schizophrenia
Regulatory Rating in Mental
New Mental Hygiene Legislation

AT THE STATE HOSPITAL, UNICA, N. Y., BY

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AT ALBANY, N. Y.

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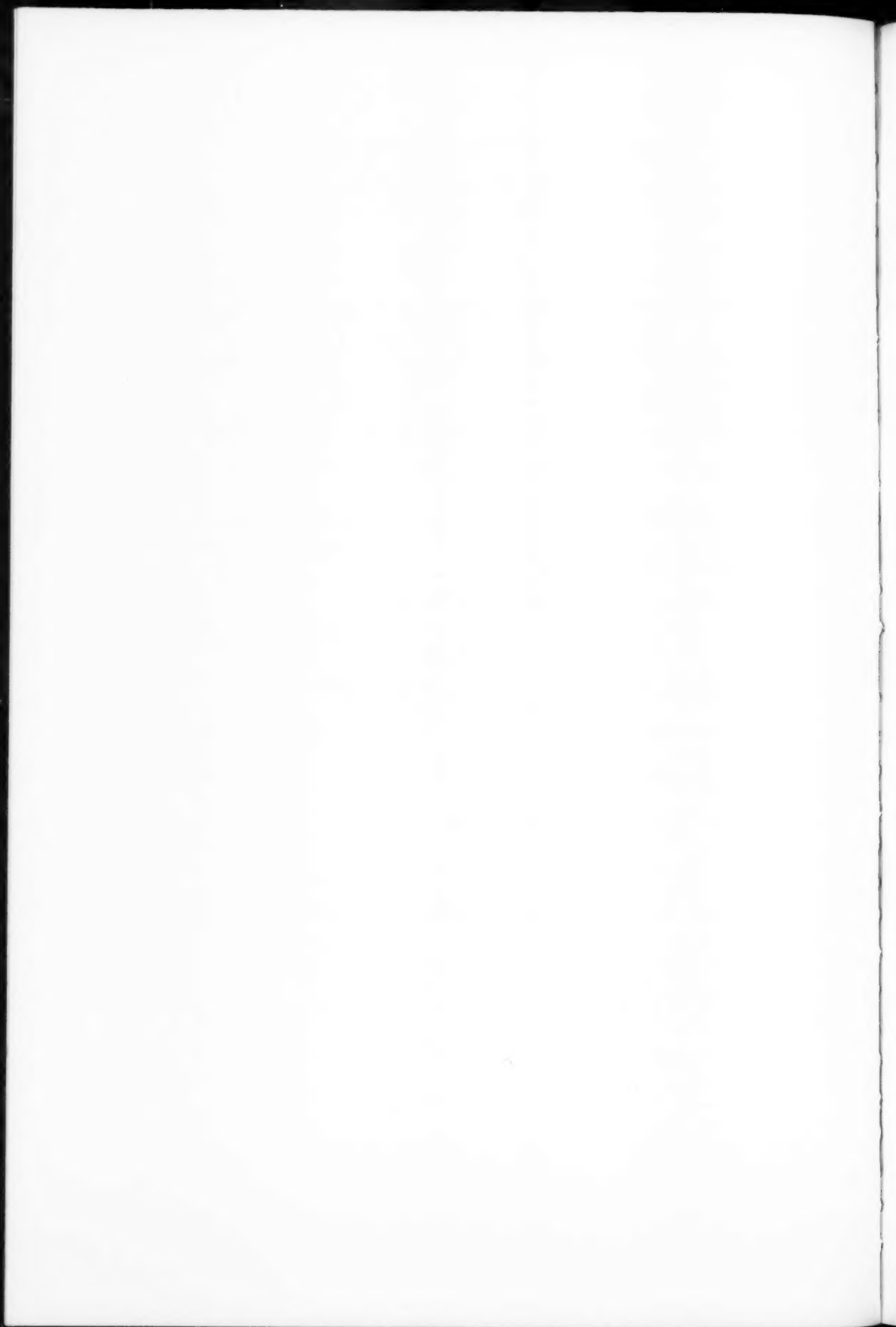
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THE STATE AND THE MEDICAL CENTER

RADIO TALK FROM STATION WMSG, NEW YORK CITY*

BY FREDERICK W. PARSONS, M. D.,

COMMISSIONER OF MENTAL HYGIENE

Some of the persons listening tonight to the radio program being broadcasted from WMSG may not know that there is under construction now in New York City a very great medical center. This enterprise sponsored by Columbia University and Presbyterian Hospital looks to the establishment of a group of hospitals clustered about a medical school. The hospitals serve a two-fold purpose. They supply, as do all hospitals, a place where sick people may be cared for and they provide an opportunity for medical students to get the actual bedside knowledge which will better fit them to practice medicine upon graduation. The medical school gets teaching opportunities for its students and the hospitals have the further advantage of having on their visiting and consulting staff the men qualified to teach and to lead the medical profession generally. Only a large city can supply the resources necessary to this happy combination, where it appears every one benefits, and most of all the patients in the hospitals. New York City, with its wealth, its numbers, its spiritual as well as intellectual and material forces, offers an occasion which the creators of this medical enterprise realized and the Columbia-Presbyterian Medical Center is the result.

While the Presbyterian hospital cooperation has been particularly stressed by me, other important groups are included. They comprise The Neurological Institute, The Sloan Hospital for Women, The Babies' Hospital of the City of New York, The Vanderbilt Clinic, and I am glad to say the State of New York.

It is fitting that the great Empire State should be included. Perhaps New York State is the greatest giver among the states of this country. It certainly has under its protecting care more unfortunates than any other commonwealth, yes, more than many combinations of states and it is ready to support any undertaking designed and likely to accomplish an improvement of conditions respecting the care of such citizens as have come upon evil days. New York State is proud to be associated with the founders of this

* Broadcast March 14, 1927.

Medical Center and as evidence of its serious participation it is spending \$2,000,000 in constructing a building which will cost several hundred thousands each year to operate.

I am not telling a secret when I speak of what the State is doing and proposes to do, so I shall enlarge further. New York State is building a 20-story structure on ground given to the people of the State by the sponsors of this Medical Center. In this structure it proposes to care for persons sick with or threatened by a mental breakdown. It proposes to select persons suitable for study and to conduct intensive research work with a hope of making discoveries, testing new forms of treatment and determining policies which may add to the scanty store of world knowledge of mental diseases and their management. That is not all it hopes to do for the community. It looks towards the establishment of out-patient clinics where persons not sufficiently incapacitated to seek hospital admission may come, talk, be examined and get information, advice and treatment concerning the management of their mental health or advice about others. Few people realize the great number of persons who are troubled in their minds, whose ability to score 100 per cent is handicapped by doubt and fears, who go through life with the brakes dragging. The State is reaching out for these persons. This is not a new field for the State as for years it has maintained in many parts of the State, clinics where people might get just this help; but here in New York City, in this great structure and as a part of this splendid medical ambition, it proposes to centralize, to develop, to galvanize and to stimulate the work which it began some years ago and the results of which, while good, have not been entirely satisfying.

The world was not made in a day and perhaps we can better measure progress by looking beyond yesterday or last week. If we look back 100 years we have every reason to be satisfied, yes, 50 or even 25 years. That latter period represents, not exactly a dark age in mental medicine, but its beliefs are not today's, and today's thoughts on the machinery by which we think and act, while they are on a better foundation than they were, leave much to be desired. If the mental disease situation were mapped, there would be zones shown, something like the polar areas. We know they are there, certain portions of coast lines are shown, an occasional mountain range is indicated, but of the actual boundaries,

the extent of the lands and of their mineral, animal and vegetable resources we know practically nothing. That describes our knowledge of mental disorders. We have touched the high spots, spotted a hill here and there, know something of the fringe of things, but of accurate and complete knowledge no claim is made. As the difficulties of arctic travel are offered as an excuse for incomplete knowledge of polar regions it may be proper now to emphasize the difficulties of exploration into the mind. We are dealing with an imponderable topic. We cannot feel it, see it, weigh it or study its structure. We can examine many minds which we know to have been sick minds and with advantage taken of all the methods known at present, we cannot see that they differ in any structural respect from a mind known to have behaved satisfactorily. Obviously, the quarrel is with our examination methods, but do we do all we can to find new methods? I do not think that we do everything, although a number of devoted experimentalists are working in this country and abroad. In any event, no matter how much we do, we should do more. We should never be satisfied, and the world never will be satisfied, until the great riddle of mental disease is solved, until there are no places on the mental map marked "unknown."

When one considers what has been accomplished in other fields of disease control, one should not be entirely cast down. I believe the problem of mental ill health is one which can be lessened and it is efforts in this direction which I now emphasize. Careful people do not make rash promises and I would not have you think that the establishment of a Psychopathic Institute and Hospital will settle all things. New York State is strong and powerful. It can accomplish much but not everything wished. This is a step in the right direction. New York State spends on the maintenance of its mentally handicapped \$20,000,000 each year and the economic loss of those it withdraws from productive effort is still greater but the efficiency loss due to individuals carrying an unnecessary load is the greatest of all. No one has sufficient imagination even to estimate it.

Such a large annual loss justifies the expenditure of substantial sums each year for research. You may ask if New York State proposes seriously to undertake this work, why does it do it in New York where property values are high, where the maintenance costs are above the average and where the distractions of city life may

interfere with serious scientific thought. There are many reasons. First of all, an institution such as I have outlined should be where the people are. If a hospital is to serve the people, it should be accessible. Principally though, the problems of one medical specialty are closely interwoven with those of other medical specialties. The thoughts of men working in one particular field are likely to become crystalized, a problem if studied too long from one position seems insurmountable. Someone working in an allied field sees the proposition from a different angle and there is a stimulus which comes from a group following similar but not identical pathways. The State hopes to profit from this cooperative effort and has reason to believe that it will.

While no claim is made to complete knowledge of the entire mental field there are certain facts of which we are quite sure and these facts are of sufficient importance to justify dissemination. The group of medical students and pupil nurses which will be completing their training at the Medical Center offers a field which should be reached. To them, by the establishment of a Psychopathic Institute and Hospital, the State of New York will have something to offer and through them will be reached an increasing number of mentally sick persons each year.

Perhaps one reason why the store of knowledge concerning mental diseases is not larger than it is may be the fact that prior to this generation the workers in this field lived a cloistered life. They did not mix much in the community. They were content to take such human material as came to them to be moulded and with that material, and rather limited resources, attempted reconstructive efforts. They worked with completely incapacitated machines. Now these same men or their followers reach out and try to get slightly damaged machines to their own very great benefit and to that of the patient. They want their cases earlier, before the bad mental habits become fixed. They are then much easier of repair and the childhood period is preferred. The handicaps of childhood are simple, life to children is not as complex and their problems are on the surface, easily seen and often quite easily remedied. If allowed to be overlaid with thoughts, emotions and experience, the problems may be so deeply buried that even the patient does not know where they are and the physician works in the dark and at a great disadvantage. It is for that reason that as we see the

mental hygiene problem today, we feel that our greatest efforts should be in the prevention of mental breakdowns. Many of these can be prevented and we do the next best thing while we are awaiting some great world-shaking discovery which will enable us to cure by wholesale. No one has reason to believe that much desired state is likely soon to arrive. It is a hope, not a belief, and until that time comes we can diligently study the individual and his problem and apply such knowledge as we have. One side of the picture, rather pleasant to contemplate, is that the physician gets from the patient just about as much as he gives. The physician learns something new from every patient, grows and is better able to help the next one. Rarely does a patient fail to bring a reward and to pay as generously as he does in mental medicine in the early stages.

The State of New York congratulates the farseeing public-spirited persons who conceived, elaborated and are prosecuting to a successful completion the medical center being erected at 166th Street near the Hudson River, and welcomes the opportunity of joining in the humanitarian effort.

THE CARE OF MENTAL DEFECTIVES IN NEW YORK STATE*

BY SANGER BROWN, 2ND, M. D.,

ASSISTANT COMMISSIONER, DEPARTMENT OF MENTAL HYGIENE

The present situation in respect to care of mental defectives in New York State will be made clearer by a brief historical review of how this care has developed from the beginning down to the present time.

The first State care for mental defectives was afforded by a small institution in Albany in 1851. This continued for a short time until the institution at Syracuse, the first in the State was started in 1854. This was not only the first institution of its kind in New York State, but the second in this country, the first having been opened in Barre, Massachusetts. The property on which the Syracuse institution stands was deeded to the State by citizens of that city. This institution is still in use. It has not been expanded greatly and its present capacity is less than 800. It will be abandoned when other accommodations are provided.

Early in the history of the institution at Syracuse, Dr. Seguin, who had done much work with handicapped children in Paris, joined the staff. Dr. Seguin created much enthusiasm in this country at that time in the way of intensive training of defective children. He and others believed that if these children were trained intensively, their minds would develop. The training resulted in better behavior of the children and in improving their personal habits and making their care easier. It forms the basis of much of our work with low grade children today; but it has not increased their intelligence.

The institution at Syracuse was planned for children who were likely to improve through training. They did not improve sufficiently to be discharged, and in the course of time the institution became crowded and other arrangements became necessary.

It was found that a school at Newark about 50 miles west of Syracuse was available and this was acquired by the State in 1878. This institution is now in use and has been gradually added to so that its present capacity is nearly 900. The policy at Newark for many years was to receive particularly women of child-bearing age. This gave the institution something of a correctional atmosphere.

* Read at Quarterly Conference at Albany, N. Y., March 24, 1927.

Very few cases were discharged and a male department has never been added.

In the meantime the need became urgent for an institution for low grade cases, *that is, the crippled and infirm*. The Oneida County Insane Asylum, at Rome, as it was then called, was made available and taken over for mental defectives in 1894. Some of the mental cases remained there for a time. At Rome many low *grade boys* were admitted for years; it later established a female department and now receives all types. When present construction is completed it will have nearly 2,000 beds.

For many years, therefore, there were three institutions within a radius of 100 miles, all up State, at an average distance of 290 miles from the metropolitan district of New York City. The number of beds thus provided was insufficient, and many cases were in county homes and other institutions, as at present.

During all this time New York City suffered through lack of beds for mental defectives. As early as in 1861 the city began to care for mental defectives at Randall's Island. Accommodations were gradually added there through new construction and through turning over accommodations already in use for this purpose. Both mental defectives and epileptics have been cared for there for some time. As late as in 1921 a number of new buildings were added, and the institution now has a capacity of something under 1,500. It is under the control of New York City.

In respect to the State, the above situation obtained until 1907. At that time the site for a new institution to serve the metropolitan district was acquired. This is Letchworth Village. Construction did not begin until some time later and has been very much delayed there until quite recently. In 1911 the first building was opened. However, there is now a capacity of nearly 2,000 beds and this will be increased to well over 2,500 when the present building plans are completed.

This survey shows that no State-wide policy has been followed in building institutions for mental defectives. Syracuse was for children of school age chiefly; Newark was for women only; Rome was for low grade cases. Letchworth Village alone was for males and females of all types, although the Board desired chiefly children of school age.

State inspection of these institutions was made by the State

Board of Charities, and fiscal control was through the fiscal supervisor. In the meantime the institutions remained overcrowded and the demand for additional beds was continuous.

As a result of this situation a Commission was appointed by the Legislature in 1914 to study this entire problem, and to make recommendations. This commission consisted of Mr. Robert W. Heberd, Secretary of the State Board of Charities; Dr. Max G. Schlapp, Dr. Charles L. Dana, Professor Stephen P. Duggan and Mrs. Mary C. Dunphy. This commission made an exhaustive study and report of the situation which is on file with the Senate Documents of 1915, a volume of over 600 pages. Most of the needs of the State were enumerated and defects pointed out.

A short time later the Hospital Development Commission as created by the laws of 1917 pointed out that there was no central control of these institutions, that the laws governing them differed in each instance, that there was no uniform law of commitment, discharge or parole of patients and that policies were laid down by boards of managers without consultation with any commission. The Hospital Development Commission recommended that a commission for the care of mental defectives be established, having powers and duties comparable to the State Hospital Commission.

In the meantime various hearings had been held in the Academy of Medicine of New York under the auspices of the State Charities Aid Association during which much light was thrown on this subject and a number of recommendations made. At about that time a committee consisting of Dr. Charles L. Dana, Dr. L. Pierce Clark and Dr. Thomas W. Salmon made a report in which there were recommendations very similar to those made by the Hospital Development Commission.

As a result of these recommendations all of which were along the same lines, the State Commission for Mental Defectives was established in 1918. Among other duties, the Commission was charged to prepare and recommend to the Legislature on or before February 1, 1919, a general commitment law for feeble-minded persons in the State of New York. Dr. Walter B. James, the first chairman of the commission, was instrumental in having this mental deficiency law written. It gave the Commission powers and duties comparable to the State Hospital Commission, without fiscal control of the institutions however, and with the powers of inspection retained by the State Board of Charities.

After functioning for eight years, the State Commission for Mental Defectives was abolished by Chapter 343 of the Laws of 1926. This chapter, known as the Reorganization Law, established a new Department of Mental Hygiene and assigned thereto all the functions of the State Hospital Commission and of the Commission for Mental Defectives. Within the new department a division of mental deficiency and epileptic diseases was created to exercise, under the direction of the commissioner of mental hygiene, the functions formerly exercised by the State Commission for Mental Defectives.

This brings us up to the present. A number of surveys of mental defectives have been made both in this country and in Europe in localities of known population. These surveys are fairly consistent throughout in the findings; that is, nearly five mental defectives per thousand population. Estimating from the population of New York State, this would make 55,000 mental defectives in the State; that is, those of readily recognized type. Various estimates have placed the total number higher than this, so it is thought that this estimate is quite conservative. It is seen that this is about the same number as the insane.

All mental defectives, however, do not need to be cared for in institutions. The higher grade types, if their conduct is good, can go to the public schools, and some under supervision, get along in industry.

It is very difficult to determine accurately the number of beds needed. Certainly there are too few at present. Considering the number of applications for admission from the known population of New York City, applications from the entire State would total in the neighborhood of 2,500 a year. By making certain comparisons which need not be gone into in detail at this time, it has been thought that 10,000 beds should be supplied to meet the needs of the State. For the year ending July 1, 1925, there were in the four institutions 5,197 inmates. The total capacity was estimated at 4,650. There were 1,060 in colonies and 958 on parole, making a total of 7,215 as the total enrollment in the institutions.

In respect to State institutions therefore, when the bond issue money was available the following situation existed. Rome had a capacity of less than 1,500 but received far more than that; it was limited in its capacity for females, most of the previous construc-

tion having been for male inmates. Syracuse was limited to children of teachable type as far as possible, and so the very low grades and the adults could not be sent there; suitable facilities exist at the institution only for school types. Newark had no department for males. Letchworth Village took both males and females of all types but was not large enough to meet the needs of the metropolitan district. Randall's Island was a city institution that should be used as a receiving center for distribution rather than for permanent care.

The result of this situation in the institutions has made it impossible to district the State. Newark could not serve the western part of the State, Syracuse could not serve any one district, Letchworth Village could not meet the needs of the metropolitan district.

To meet this situation and to supply 10,000 beds, the following general plan has been recommended and up to the present has been adopted:

Of a population exceeding 10,000,000 in New York State, something over 6,000,000 is from the metropolitan district. About 4,000,000 are in the upper part of the State. Therefore, 6,000 beds have been planned to serve the metropolitan district and 4,000 to serve the up-State. The plan is to extend Letchworth Village to receive at least 3,000 inmates. The institution will be near this capacity when present money allocated there is expended.

The new institution in Dutchess County at Wassaie should have an ultimate capacity of 3,000 beds. Present money available from the bond issue will not give it an initial capacity of that number. It will have to be completed later. These two institutions when completed, however, will make 6,000 beds to serve the metropolitan district.

The institution at Rome is centrally located and can serve the large central district of the State where there is a population of about 2,000,000. When present plans are completed at Rome the institution will accommodate something less than 2,000 inmates, males and females of all types.

The next problem has been to make satisfactory provision for the western part of the State. The situation has been given careful study and the most feasible plan appears to be to enlarge the institution at Newark to serve the western part of the State. This institution is 98 miles from Buffalo. It is working under a dis-

advantage now since male patients cannot be received there. When it receives all types, including both sexes, and has an ultimate capacity of 2,000, the problem will be solved.

The institution at Syracuse which has served for many years, is unsuitable for further use and there is general agreement that it should be abandoned. The two institutions up-State therefore will supply 4,000 beds between them, and care for the up-State population. Such plans when completed will eliminate the travel of the New York City cases to far up State. It will enable relatives to visit patients more frequently, and it will make it possible for social workers and other members of the staff of the institution to study the homes from which children come, and get more suitable histories and records.

From the physical standpoint therefore, it would appear that there is nothing inherent in the location of these institutions to keep them from being placed on a satisfactory basis. Additional funds are of course necessary.

The administrative organization of these institutions is practically the same as in the State hospitals. In some states it has not been appreciated that the care of mental defectives is a psychiatric problem. A number of institutions have lay superintendents. In Rhode Island for a time the institution for mental defectives was under the Board of Education. This arrangement proved unsatisfactory, however, and has been changed. In certain states the medical work is merely represented by a visiting physician and not a resident medical staff.

In New York State the institutions are organized and administered in the only way that it would seem possible to administer them satisfactorily; namely, a medical superintendent and a medical staff, with administrative personnel and ward personnel. But there is one important feature of these institutions which differs from the State hospitals. They are called schools, and they have a teaching staff for the children.

With mental defectives this teaching and training is the center of the institutional work. It is in some ways the same as occupational therapy, but it is rather different, too, in some respects. The children are first taught kindergarten work; then the elements of hand work and manual education; then later domestic work for the girls—all kinds of practical things which they might meet in life; and farm work or trade work for the boys.

Some of the children are able to go to about fourth or fifth grade in regular school work. We do not wish to commit them to an institution and not teach them to read and write if they can learn to do so. Therefore this academic work has to be carried along at the same time, for a certain number.

The school work of the institutions, therefore, considered in its broadest sense, is its most important activity. It has not been developed very evenly as yet. In fact it is somewhat in the experimental stage and at no institution have final standards been finally reached. At some institutions, not in this State, however, one feels that too much grade work is given.

The institution at Syracuse has always been for children of school age, hence the school there has existed longer than at the other institutions. A visit to that institution will show the extent to which the training is carried on in academic work, manual training, hand work, and also a higher grade of training for both the boys and the girls.

At Rome a somewhat different plan has been necessary because of the character of the inmates in the past, and for other reasons. The colony work at Rome is considered an essential part of the training for older children, and lately special colonies have been started and a teacher visits these colonies to give special training during part of the day.

At Newark, the institution having been chiefly for adults and the younger children having been received there only during recent years, the school work is less highly developed than in the other institutions.

At Letchworth Village there are large, new buildings with staff and equipment for both the boys and the girls, so that the school work in its broadest sense plays an important part in that institution.

The medical staff of the institutions has a different problem to deal with than at the State hospitals. The social problems of environment and early surroundings loom very important in all of these cases of mental defect. Two factors play an important part, the first of course being an inherent lack of intelligence. Adjustments have to be made at a lower level; but in many cases the important thing is a disorder of personality. And here we have a field for much further observation and study than has been carried on heretofore.

It probably is thought by many that the work with mental defectives is discouraging. Experience shows that this is far from being the case. The higher grade mental defectives are not in institutions solely because they lack intelligence. The higher grades have sufficient intelligence to get on in the world under certain circumstances if their conduct is satisfactory. They are suffering from personality disorders. These are the hopeful cases. We cannot say just how much can be accomplished through adjustment, training and study of this type, but we do know much can be done.

The inmates in these institutions are, from one point of view, divided into three main groups: First, the crippled and infirm. These are practically hospital cases. They have to be cared for in every way. They are generally classified in a separate building as far as possible. Frequently the higher grade girls assist in caring for these inmates. This is mostly a medical and custodial proposition. They are often young, and die relatively early. The school children are the second group. They are those up to 16 years of age. They represent the most favorable group in the institution. When there are sufficient beds it should be very helpful to the community if many more of the high grade mental defectives of school age could be taken into the institutions and trained for four or five years; such as those with bad home surroundings where nothing can take the place of institutional training. The third class are the adult working group. These do the work of the institution and are not sufficiently intelligent to live outside. But in the institution they carry on the farm work and the girls carry on the domestic work.

So much has been said about the colonies that they will only be mentioned at this time. The first farm colony was connected with the Syracuse Institution at a farm at Fairmont, started in 1882. The first colony at Rome was started in 1906.

These colonies have developed in all the institutions except at Letchworth Village. A clause in the law makes it possible for part of the earnings of the inmates to be spent for the upkeep of the colony, the inmate also receiving part of the earnings. On July 1, 1926, there were 1,108 cases cared for in colonies; 853 at Rome; 235 at Syracuse; 20 at Newark.

There seems no reason why these colonies cannot be considerably

expanded. Their management is a considerable tax on the institution both in personnel and in other ways; but the children do very well there. They are happy and partly self-supporting. The colony system seems a useful preliminary to parole. At least, parole may be tried after the child has been in a colony for a time.

A word as to the methods of commitment. There are two forms in use: The judicial commitment, which is practically the same as commitment to the State hospitals, and commitment by the county superintendents of the poor. This form of commitment was carried over from the Poor Law. It is not a judicial commitment. It makes an additional form of admission to the institutions and has been considered up to the present at least, a useful form. A satisfactory voluntary commitment arrangement has not been reached. This will be worked out through additional legislation in the future.

There are a few private institutions in the State for the care of mental defectives. These are licensed by the Department. At present there are seven such institutions, run by private individuals for the training of children. They are called schools and they have a population of less than 30 children as a rule. To meet the needs for additional beds, certain other institutions have been licensed. The Brunswick Home in Long Island receives mental defectives from certain counties. It is a private corporation, receiving various types of dependent people. Something in the neighborhood of 222 mental defectives are cared for there at the present time, 88 from Erie County. St. Ann's School of Industry at Albany is licensed to care for mental defectives as well as the Brooklyn Home for Crippled Children.

A large part of the problem in the care of mental defectives is community supervision. This supervision of mental defectives can never be done entirely by the Department of Mental Hygiene. A very good plan would appear to be for each county to undertake this psychiatric work, possibly organized by the Department, with one or more psychiatric workers and a psychiatrist to direct the organization. This is already being started in some districts. When it is more general in the State, the matter of community supervision of psychiatric cases, including mental defectives and delinquent children, will be on a better basis. It seems necessary for the State to initiate this work as to organizing it, particularly in the rural communities. In fact, in certain communities, the

State will probably always have to organize and carry on a considerable portion of it.

At present, in the care of mental defectives and problem children, there are six social workers under the Department. One of these workers is stationed in the western part of the State, at Buffalo. She organizes, as far as is possible, the work in that area, attends clinics and does such follow-up work as cannot be delegated to existing local societies. Another worker is stationed in Syracuse, supervising the county and field work in counties in that locality. The third is stationed in Malone, covering a large rural area. The fourth is stationed in Albany, and a fifth at Newburgh. The sixth supervisor of this work is stationed in the office in New York. These social workers in part organize local communities, in part examine cases referred to the clinics, and in part supervise a number of cases in their districts.

The out-patient clinic in mental hygiene work is a most valuable asset. A clause in the former Mental Delinquency Law made it possible for such clinics to be organized directly by the Commission. Traveling expenses and personnel were granted by the Legislature to conduct the clinics. The result is that, at present, there are two physicians under the Department doing this clinic work. Clinics have been established quite widely throughout the State, particularly in rural districts. They serve for the early examination of a number of children for whom this service could not otherwise be obtained. They likewise are educational in the community and demonstrate to the people in the various communities what is being attempted in mental hygiene and child guidance. These clinics, while originally for the examination of mental defectives, have taken on much broader functions and are practically child guidance clinics, similar to those instituted by the National Committee for Mental Hygiene. Last year 85 clinics were conducted in various parts of the State and 1,982 children were examined. The personnel consisted of those furnished by the State Commission for Mental Defectives, by the medical staffs of institutions—both the State schools and the State hospitals—also some physicians in private practice. State hospital clinics and these child guidance clinics would appear to form the nucleus for the new Division of Prevention.

The function of the public schools in the training of mental defec-

tives remains to be mentioned. This is under the Department of Education, although the Department of Mental Hygiene touches the problem from a number of angles. In 1917 a law was enacted providing for the establishment of ungraded classes in the public schools for children who are three years or more retarded in their school work. A similar law exists in Massachusetts and in other states. The ungraded classes therefore have not been in existence very long in this State. There has been some difficulty in establishing them. There is the additional expense for space, equipment and the higher salaries for the special class teachers. To meet this need, legislation was passed in 1923 by which the State assumes part of the responsibility for these special class teachers. Last year there were approximately 9,375 children in ungraded classes of the State, 6,205 of them being in New York City.

The problem of these ungraded classes, in fact of all types of special classes in public schools, is far from settled. Some schools have what is termed "rapid advance" classes. Some schools have classes for the physically handicapped. In some there is considerable trade and industrial work. It has been suggested that the entire school curriculum be made more flexible and enriched in a number of ways. All of this will doubtless improve facilities for the backward and defective children. Just how this will eventually be worked out in the Department of Education remains uncertain. Certainly a campaign of mental hygiene for school teachers, social workers, nurses and visiting teachers in schools, is necessary.

The question of defective delinquents remains to be mentioned. In our institutions for mental defectives there have always been a small number who are very disorganizing; a few older boys and older girls are very difficult to manage. The late Dr. Fernald of Massachusetts was very concerned over this type of individual. They appear to form a small group by themselves for which some special provision is necessary. Toward this end a separate division for mentally defective girls over 16 years of age was made at the New York State Reformatory for Women at Bedford Hills. This was the result of recommendations from a number of interested people. This division still exists but there are less than 100 girls in it. It has never worked out in a very satisfactory way with the rest of the institution, and other provisions are necessary.

In 1921 the Eastern New York State Reformatory at Napanoch

was changed by law to an institution for defective delinquents, and placed under the direction of the State Commission for Mental Defectives. This institution, partly perhaps because of its physical characteristics—having been built as a penitentiary with cell block—has tended to admit markedly criminal types. The law made provision by which defective delinquents can be transferred there from prisons, reformatories and other penal institutions. Also a direct court commitment was provided for in the law. Inmates of this institution have serious criminal records as a rule, although they are also mentally defective. Recent legislation has placed the management of this institution directly under the Department of Correction. The large number of defective delinquents appearing in courts and penal institutions, seems to make this a correctional problem in the case of the severe types. It may be possible to manage milder incorrigible types at the State institutions by special provisions.

The more obvious needs for mental defectives in this State may be briefly stated. The present building program will have to be completed before the State can be districted. The overcrowding will then be eliminated. Although the situation of overcrowding is unsatisfactory in the State hospitals, it is even more unsatisfactory in some respects in our State schools. Moreover, all applicants for admission are not admitted to our State schools as is the case with the State hospitals. Many are kept on a waiting list and have to be disposed of in other ways by the local authorities.

In administrative ways these institutions have suffered through lack of central representation through a department in Albany. The State Commission has been in existence for less than 10 years, and uniformity of administration of the various institutions therefore has not existed.

A scientific division for special studies, already started at Letchworth Village should be further developed for research work on this problem. There appears to be no place either in this country or abroad where research in the problem of mental deficiency has been carried on to a suitable degree. The needs for this are, of course, obvious.

The training and educational work for mental defectives considered in its broadest sense should be supervised by a director—

comparable to the director of occupational work in the State hospitals. This training work requires considerable study. Legislative appropriations for the various institutions have been insufficient to carry it out adequately in the past.

When the institutions can receive all cases, a survey will have to be made of county homes and many other county and semi-private institutions. Mental defectives should be removed from these and sent to the State schools, just as was necessary in the case of the insane when State care was put into effect. In the case of mental defectives it is impossible to do this at the present time. Just how many cases are in these various institutions is difficult to say, but their number is considerable.

It is evident that we still have some distance to go before provision for mental defectives in this State is as satisfactory as the provision for mental patients in the State hospitals. Had this responsibility been placed under the Lunacy Commission in 1890, State care would have then been established in all probability, and much of this work have been already accomplished. However, knowledge of problems of the care of mental defectives in both this country and abroad has not been as clearly understood as with the care of the insane. General policies as to what types to care for in institutions, what types of institutions to build, the administration of these institutions, have been developed gradually. These problems are not entirely clear in all respects at the present time. Further studies are necessary.

A recently published statistical survey of the institutions for feeble-minded and epileptics in this country, prepared by the Federal Census Bureau with the assistance of Dr. Pollock and Miss Furbush, is an important contribution to this subject. Matters such as the types of cases usually admitted, whether chiefly idiots or chiefly morons, are indicated in this report. Likewise such matters as death rate, discharge rate, admission rate are shown. Lack of uniformity of policy, of course, of many of the institutions, makes such data uncertain in some ways, but on the other hand the large numbers dealt with partly removes this objection. While our policies in the future will doubtless change considerably, we appear to have certain basic principles now to guide us.

The care of a mental defective is not as immediately urgent as is the hospital care of a mental case. There is no alternative but to

send a mental case to an institution in many instances. However, the general effect upon the community of the neglect of the care of mental defectives is probably quite as far reaching as would be the neglect of mental disease.

Mental deficiency enters into many situations, where it is not recognized as such. It is at the basis of a number of public school problems—administrative and disciplinary. It plays a part in delinquency and in criminal conduct. It is the underlying cause of much of the dependency and poverty in the community; likewise of immoral conduct. Large charitable organizations have more mental defect to deal with than they probably realize. Thus it acts in insidious ways often, as well as in recognizable form.

It is, therefore, not easy to determine just what part mental defect plays in the welfare of the State. It is impossible to ascertain the total cost. It makes itself felt in many different ways and often under various disguises in which it is not recognized. Hence, a comprehensive State-wide program in which one department is responsible appears to be the only way of meeting the problem.

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THE PROBLEM OF EPILEPSY IN NEW YORK STATE*

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This paper can be but a brief review of the subject, epilepsy: what the term implies, some of the alleged causative factors, its frequency, out-standing symptoms and care and treatment in the home, clinic, or institution, of those affected. It is not a scientific treatise, simply an effort to present some points pertaining to the disorder and its management.

A convulsion, because of its alarming effect on the bystanders early made an impression on mankind. Most persons, even now, do not appreciate that the essential symptom of epilepsy is disturbance or loss of consciousness, including many types of seizures other than convulsions. Consider normal gradations of impairment or loss of consciousness, e.g., absentmindedness, mental concentration, sleep, etc. It may be difficult to differentiate between syncope and an epileptic attack.

The ancients recognized the disorder and aptly characterized the dramatic manifestations as "seizures" or "attacks." Its appearance early in life, connection with a brain disorder, the alleged peculiar temperament, relation to habit, etc., are recorded. The interest aroused by it is manifested in the vast literature accumulated through the centuries.

Recurring epileptiform convulsions are observed in many disorders, as well as those of the nervous system. These are but symptomatic. In idiopathic epilepsy the cause of the symptoms is not apparent. Many formerly classed as epileptic are now placed in other categories, e.g., spasmophilia, uremia, puerperal eclampsia, apoplexy, brain tumor, general paresis, diabetes, etc.

Aldren Turner and others believe the importance of the hereditary element in the convulsive disorders is underestimated, admitting the older writers did not sufficiently distinguish between epilepsies and many irrelevant factors. Thirty-three per cent of Turner's cases showed existence of family predisposition and he refers to a familial group, in which the disorder may be traced through several generations. He admits 67 per cent, the group most commonly encountered in private practice, do not show familial disability.

* Read at Quarterly Conference, Albany, N. Y., March 24, 1927.

Myerson contends epilepsy is an affair of the individual, not the stock, and that it represents injury, perhaps to germ plasm, whether that injury be pre- or post-natal. Evidence may possibly be available, although difficult to obtain, of some local disease or disorder of the germ-forming organs, or of the mother during the period of intra-uterine life of the child, but as Turner states, those causes are mainly in the realm of conjecture.

Many believe there are numerous types of epilepsy with their origin differing as widely. Timme mentions a possible connection between migraine, epilepsy and low blood sugar content and that defects or anomalies in the nervous mechanism produced prenatally by certain accidents, may be inherited, indeed, it is only in this way that we can explain the origin of familial diseases.

Metz says, "There is no conclusive evidence for the transmission of acquired characteristics, but this does not prove that acquired characteristics cannot be transmitted."

There must be a degree of consanguinity in the race, as it does not seem otherwise possible to have had room on the earth for all direct ancestors ten generations back of all persons now living. One ought to distinguish between inheritance of disease and inheritance of disposition to disease.

Barrett quotes Snell: "In genuine epilepsy heredity tainting was present in 81.26 per cent, this is about equal to what exists among the psychotic in general, viz.; 69-82 per cent, and is somewhat higher than exists among the non-psychotic, viz.; 67 per cent.

Many, in referring to heredity, include conditions occurring between conception and birth, forgetting that heredity refers to the make-up of germ plasm and not to what occurs subsequent to coalescence of germ plasm from the respective parents.

As an instance of biochemical hypothesis, J. M. M. Shaw believes epileptic phenomena are due to acidulation of the lymph and blood by too rapid metabolism of nucleo-proteids of cortical cells and other tissues, which, in the circulating media, shows a proclivity to an abnormally rapid agglutination, the primary cause being inherent defect in tissue which may be hereditary, or due to absence of an unknown regulating substance.

Alleged preponderance of left-handedness in members of families of epileptics is not generally accepted.

Buchanan asserts, "A diminution in number of essential epi-

leptics by segregation is not to be hoped for, as the person with migraine is more likely to produce epileptic offspring than the epileptic himself, as essential epilepsy and migraine are the expression of a biological character. If such striking characters as waltzing in a mouse and tumbling in a pigeon are hereditary, characters equally striking might appear in man."

Dunham explains epileptic phenomena by reactions of noxious stimuli upon the germ cell, whose environmental maladjustment induces abnormal, morphological differentiations in the embryo with power of hereditary transmission of tendencies toward defect.

Developmental anomalies of structure are found in brains of epileptics, but similar changes may be found with other diseases and even in brains of normal persons. Are there any means by which neural or vasomotor deficiency or instability may be detected, except by inference, after epilepsy has declared itself?

But a very small percentage, perhaps 5 per cent, of children and adults receiving severe head injuries involving the contents of the skull, ever develop convulsive seizures.

Turner writes, "If it were possible to follow through for long periods more of our epileptic patients it might be conceded that cerebral tumor was possibly a more common cause of recurring fits than is generally accepted, more especially of that variety which begins in adult life. In these there is absence of any localizing sign."

Attention to children showing possible precursors or allied forms of epilepsy such as disturbed sleep, unusually restless disposition, irritability, turning pale or becoming cyanosed under excitement, etc., may prevent the development of an epilepsy in later years.

It is generally accepted there is no single clinical entity to which the name of epilepsy may be applied. Many seizures, especially the milder types, are long unrecognized or their significance not fully appreciated. Every reaction in an epileptic is not, however, a phase of that disorder, as he has reactions common to mankind, these being but in a small number disordered or changed as a result of epilepsy. Emotional explosions, irritable periods and psychic clouding are not peculiar to the epileptic. The majority of alleged exciting factors of epilepsy are open to question, in many instances being but coincidental, e.g., whatever outstanding occurrence impresses the relatives at the time. Because certain symptoms or

conditions are found in epileptics it does not necessarily follow that they have a relation to the epilepsy itself. Automatism, a condition frequently observed following minor seizures and incomplete major attacks, and seldom observed after a complete major convulsive attack, is frequently unrecognized, in consequence of which an unfortunate epileptic may be arrested. The patient is not cognizant of what transpired during such automatic period, nor of having had the seizure proper.

While experimental convulsions in animals resemble convulsive reactions in the human being, no seizures corresponding with petit mal attacks have been reported. Severe types of convulsions, automatic periods, and the aura of fear, can all be observed in dogs suffering from "fright disease," a disorder supposed to be due to infection of the central nervous system and accompanied by gastro-intestinal disturbance.

The great convulsibility of the first three years of life, as result of incomplete myelinization of the central nervous system, spasmodophilia, etc., gradually diminishes, cortical inhibition developing until the tendency toward convulsions almost disappears after the fourth year, although in certain adults they may recur, e.g., puerperal eclampsia, diabetes, etc. In a child a single convulsion is more suspicious in foretelling future epilepsy than is a series of convulsions associated with the onset of acute infectious disease, gastro-intestinal disturbances, etc. The fall often ascribed as the cause of the first seizure may be the result. Damage to the brain from one seizure may predispose to others.

If there is vascular spasm of cerebral vessels at the time of a seizure what causes it? Are vascular changes and resulting cortical anaemia the cause or consequence of the seizure? Some hold that some toxin acts as an irritant to the cerebral blood vessels leading to sudden local spreading anaemia of the cerebral cortex.

Assuming a vascular mechanism in the initiation of the severe convulsion, Turner asks, does a similar condition occur in petit mal or in so-called equivalents?

Rows and Bond assert, "Epilepsy is separated from mania and hysteria only by occurrence of the seizure, which although most dramatic, is not the most important part of the disturbance of consciousness." The question arises as to whether intensified emotion, without other associated factor, is sufficient to give rise to the

major fit. It is known that prevention or postponement of a fit in epilepsy is not always desirable because in some the occurrence results in a feeling of relief.

Juarros says, "The convulsive crisis is one of the most pretentious clinical manifestations of epilepsy, but is not epilepsy which has a boundless variety of symptoms all united by the common bond of their paroxystic aspect. What is specific is the mental condition."

The disorder has been regarded as a phenomenon of cerebral inhibition rather than of excitation, the essential factor being temporary loss of function in the higher brain levels, permitting sub-cortical regions, including pons and medulla, to overact. This is well described in Kinnear Wilson's work on decerebrate rigidity.

There is a close connection between sleep and the occurrence of many convulsive attacks.

Wiersma theorizes loss of consciousness, then the convulsion, because of consequent loss of inhibitory control over lower brain centers.

Cerebro-spinal fluid analysis has given thus far almost consistently negative results.

Theoretically, the immediate cause of epileptic seizures may be transitory edema of part of the brain from disturbance of cerebral vascular supply caused by insufficient or excessive activity of endocrines, protein sensitization, toxins from the intestine entering the circulation and eventually reaching the brain, toxic substances produced locally in the brain from various causes, etc. Can our knowledge advance sufficiently to permit observing vital processes in the living brain cell? Faulty metabolism of foods may result in substances toxic to brain cells and cause seizures although simple retention of ordinary waste products may not so act.

It would seem that a defective nervous system acted upon by a chemical substance of some unknown make-up and origin would be the simplest explanation of the exciting etiological factor. The defects are multiple in nature, and so the offending substances may be of varying chemical formulæ in different cases. Apparently similar defects are found in non-epileptics.

Many habitual epileptics present some degree of mental obliquity and being unable to adjust themselves to social conditions become self-centered, morbid, egotistical and moody, difficult to live with

and often worthless as workers. Many question the existence of the so-called mental make-up in the potential epileptic, believing with Aldren Turner that such mental endowment, when found, is not necessarily associated with epilepsy; and is it a correct description of the mentality observed before the onset of seizures? Temperamental qualities of young epileptics seen in private practice show the outstanding features as being nervous, anxious and easily worried, even highly emotional, which reactions may be seen among a number of any class of individuals. Young people who have been regarded as normal, and then develop epilepsy, probably from restrictions placed upon occupations, pleasures and recreations easily develop the belief they are abnormal, become sensitive to criticism and develop asocial habits.

Turner mentions the relatively frequent occurrence of epilepsy in only children. In reviewing 2,000 histories of patients at Craig Colony, it was found that but 122 were only children, but there is no exact data as to the number of miscarriages or still-born before the only child mentioned, who in such instances would be the only viable child in that family.

Many brighter epileptics look upon their ailment as of greatest importance, not only to themselves, but to others. Some of the most intelligent among them, despite recurring accidents and repeated warnings, never appreciate the necessity for avoiding dangerous situations nor for refusing to undertake work and assume responsibilities they can not possibly carry out. This attitude, termed "epileptic optimism," may be ascribed to lack of insight as to handicaps accompanying the disorder, to reaction of the individual to a hostile environment or to a determination to make the most of more or less difficult situations. Careful supervision often prevents accidents, injuries, even sudden death, but to entirely eliminate them is impossible, e.g., in those having no warning of seizure impending or too brief an interval between the warning and loss of consciousness, from asphyxia during sleep, food aspirations, etc.

While many are prone to complain of numerous symptoms, as does a hypochondriac, and find fault with various matters in every day life, nevertheless depressions are uncommon and actual suicidal tendencies infrequent. The average epileptic is inclined to look forward to restoration to health.

Even if one admits a constitutional make-up peculiar to epileptics,

one could expect mental trends differing in degree only from those observed in many other persons, e.g., selfishness, poor judgment, poor adaptability to environment, little personal pride, restricted interests, etc. Epileptics may show a greater slowness of mental operation than do others, and lack of mental tension results in deterioration with loss of interests in matters formerly actively attended to. In those of higher mentality, when hope is given up of recovery and loss of interests follow, mental deterioration may be quite rapid.

Some epileptics have very numerous light attacks which if recorded, if possible to count them, would greatly outnumber those of more severe type.

Different observers vary widely in their conception of what constitutes a fit, in methods of recording and of dealing with the figures.

Some present no fits after admission to the Colony. Did these patients have true seizures before admission, and is the cessation of seizures after admission connected with removal from irritating contacts in earlier environments?

Turner claiming the essential feature to be disturbance of consciousness, occasional, sudden, swift and brief, believes the term epilepsy should be restricted to such phenomena and to apply the term equivalent to the longer periods of disturbance.

At the Craig Colony are patients in whom the disturbance of consciousness is not always sudden nor is it brief.

Clark says there is a disorder but no loss of consciousness, as such, in the epileptic fit, rather a retraction of the field of consciousness and corresponding heightening or intensification of subject awareness, postulating a retreat from reality and freedom from conflict. Clark, in a critical discussion on constitutional anomalies in epileptics concludes, "There is no essential physical alteration peculiar to the epileptic, either as result of an inheritance or from effect of the disorder."

No general census of epileptics, of any value, has ever been possible, owing to difficulty in determining as to what the term epilepsy signifies and the reticence of families in whom there are epileptics to admit the existence of such condition. It seems impossible to ever obtain the exact number of those having convulsions in infancy and early childhood. Many of these before being observed or

treated or the condition diagnosed, succumb, thus not reaching an age when they would be presented for diagnosis. In the Federal census, as of January 1, 1923, pertaining to epileptics in institutions, in the compilation of which Dr. Pollock actively participated, there were reported 23,760 epileptics in institutions caring for the insane and feeble-minded, as well as special institutions for epileptics, the latter caring for 8,519 of the total number. As the report states, available data give no clue as to the probable increase, decrease or prevalence of the disorder in the population at large.

According to the 1920 Federal census, there were in New York State under five years of age 1,010,290 individuals, or 9.7 per cent, of the total population. Estimating conservatively that 10 per cent of all young children are subject to convulsions, 101,029 of the group mentioned would have had convulsions. Estimating the proportion of epileptics in the general population as 3 per 1,000, approximately 3,000 of all children under five years of age, or 33,000 of all ages, in this State, are epileptic.

Estimates vary necessarily with different views regarding prevalence of convulsions in early childhood, the number of such later becoming epileptic, and the frequency of epilepsy in the general population. As many epileptics die early, the proportion of epileptics lessens as the age of the general population increases.

As so many factors must receive consideration, there is much discussion as to the age when it is possible to diagnose epilepsy. Epilepsy can be diagnosed with more reasonable certainty at an early age if there is an evident organic basis present, e.g., cerebral palsy, mental impairment resulting from encephalitis associated with acute infectious disease, etc.

Any alleged increase in the number of epileptics in any community is probably more apparent than real, statistics being so incomplete that they must be cautiously accepted and remembering the interpretation of the term epilepsy and what it includes differs widely.

While it would seem easily possible to obtain through relief and social organizations, physicians, nurses, teachers and others coming in contact with children, data as to the number of epileptic children in a particular community, nevertheless this is very difficult. There is little information as to the number of epileptic children under school age or of such children not in school who are of

school age, e.g., the Board of Child Study of Chicago reports only 139 epileptics in the public schools of that great city, believing, however, there are more. In Cleveland, Ohio, only 100 cases of epilepsy were reported among all children of school age.

The number of applications for admission received by the Colony from the different political subdivisions of the State varies out of proportion to their population. This is due in part to epileptics being more easily recognized in urban than in rural communities, it being more difficult for them to adjust to urban conditions or in many cases to be tolerated in such communities. It also depends on the active interest of the Commissioners of Public Welfare, or similar officials.

The patient population at Craig Colony, March 1, 1927, by counties was as follows:

Hamilton, Lewis and Rockland, each	0
Yates	2
Columbia, Orleans, Schuyler, Washington and Wyoming, each	3
Greene, Schoharie and Seneca, each	4
Cortland and Putnam, each	5
Herkimer and Tompkins, each	6
Chenango, Genesee, Nassau, Suffolk and Ulster, each	7
Allegany, Essex, Sullivan and Wayne, each	8
Broome, Clinton, Dutchess, Madison, Montgomery and Tioga, each 1....	9
Franklin and Schenectady, each	10
Chemung, Delaware, Jefferson and Niagara, each	11
Fulton	12
Otsego and Warren, each	13
Cattaraugus and Livingston, each	14
Oswego	15
Cayuga, Rensselaer, St. Lawrence, each	16
Chautauqua and Saratoga, each	17
Ontario	18
Steuben	19
Orange	21
Albany	31
Oneida	34
Onondaga	48
Westchester	50
Monroe	86
Erie	104
New York City	777
<hr/> Total	<hr/> 1,587

In reviewing the histories of 7,000 patients admitted to the Colony since its opening in January, 1896, it is found that in 78 per

cent their epilepsy made itself manifest before the age of 20 years, (28 per cent before 5 years, 18 per cent between 5 and 10, 18 per cent between 10 and 15 years, 14 per cent between 15 and 20 years).

The average epileptic admitted to the public institution is not "fresh" but has had the disorder for a considerable period, often many years. In the majority the condition had been present for more or less prolonged period, as but 47 per cent of all those were under 20 years of age.

The mentality of those received at Craig Colony in recent years has been: normal, 16 to 18 per cent; moron, 30 to 33 per cent; imbecile, 22 to 26 per cent; idiot, 6 to 10 per cent; deteriorated from normal or moron, 14 per cent. Thirty-six per cent are classed as idle, it being impossible to assign them to any occupation; 14 per cent are assigned to school; the other 50 per cent to work in the various occupations. Approximately 90 per cent of all admissions are native-born, and 50 per cent of the parents are native-born.

Regarding etiology, the following was determined in 1,502 patients admitted during the six years just past:

CAUSES OF EPILEPSY IN 1,502 ADMISSIONS TO CRAIG COLONY

	Males	Females
Hereditary factors—direct and indirect	68	92
Essential due to personality make-up.....	35	35
Development defect	122	36
Trauma at birth	33	15
Trauma, by direct violence since birth.....	39	34
Cerebropathies; meningitis, meningo-encephalitis, polio- encephalo-myelitis	90	95
Syphilis, acquired	12	7
Syphilis, hereditary	10	7
Alcoholism	13	1
Endocrinopathy	33	33
Cerebrovascular sclerosis	25	9
Miscellaneous	2	3
Unclassified	380	273
Total	862	640

At the end of the last fiscal year there were resident in the several State hospitals a total of 1,113 epileptics with an additional 63 on parole, the number in the various State hospitals varying from 33 at Rochester to 165 at Manhattan. During the last fiscal year epileptics reporting at State hospital clinics with psychoses numbered 10, and without psychoses 54.

During the fiscal year ended June 30, 1925, among the voluntary cases admitted to the State hospitals were 8 epileptics; among the first admissions during 1923, 153; during 1924, 116; during 1925, 162; during 1926, 133, averaging about 2 per cent of all admissions. Of readmissions for the fiscal year ending June 30, 1925, there were 40 epileptics, or 2 per cent of all readmissions.

Whether hospitals for the insane should care for all insane epileptics, or whether Craig Colony should be provided with proper facilities to relieve the State hospitals from caring for a number of such patients has been considered in the past. If some epileptics were removed from the hospitals for the insane, beds would be available for other types of patients.

At the clinics conducted by the Commission for Mental Defectives during the last fiscal year 42 epileptics of various degrees of intelligence were reported; during the previous year there were 96, presumably different individuals. Some of those seen at clinics no doubt later entered State institutions. It is presumed that the individuals seen at State hospital clinics were not the same as those observed in other clinics. There are now resident in the four State schools for feeble-minded 153 epileptics.

The census of epileptics in the different counties, supposed by law to be reported annually to the State Board of Charities, was as follows for the year, 1925, the report for 1926 at present being incomplete. (Greater New York is not included in this list.)

Dutchess, Fulton, Genesee, Greene, Hamilton, Nassau, Orleans, Putnam, Rockland, St. Lawrence, Saratoga, Schuyler, Seneca, Steuben, Ulster, Washington, Warren	None
Cattaraugus, Cortland, Jefferson, Oswego, Tioga, Tompkins, each....	1
Sullivan, Wayne, each	2
Allegany, Chemung, Delaware, Schenectady, Schoharie, Yates, each....	3
Chenango, Madison, Niagara, Rensselaer, each	4
Chautauqua, Monroe, each	6
Otsego	7
Livingston	11
Erie	12
Cayuga	14
Westchester	21
Broome	26
Albany	35
Oneida	38
<hr/> Total	<hr/> 220

Clinton, Columbia, Onondaga, Ontario, etc., made no report; and others, e.g., St. Lawrence, Saratoga, Steuben, reported no epileptics. Of course this does not mean that there are no epileptics in those counties. Some reported, as Albany, 35; Oneida, 38, Broome, 26, and Westchester, 21, presumably desiring institutional care. No doubt some reported by poor-law authorities are included in the number seen in clinics or later received in some State institution.

Epileptics have been cared for in State hospitals and similar institutions since their first establishment. In 1873 Dr. Ordronaux referred to special provision for epileptics on Blackwell's Island, and in 1879 the State Board of Charities called attention to epileptics needing intelligent oversight and care equally with the insane. During the next decade, a number of persons, chief among them Dr. Frederick Peterson, exerted every effort to secure the establishment of a special Colony, in which epileptics could receive care and treatment, and be allowed various privileges as a result of which they could lead a comparatively comfortable existence compared with the hedged-in life they might be forced to conform to in the outside world. In 1892, after action taken by the State Charities Aid Association, the Legislature authorized the selection of a site for such a Colony, which was duly established at Sonyea in 1894, being named in honor of the late chairman of the committee who selected the site, Hon. Oscar Craig, of Rochester, New York.

The plan of the Colony was to arrange cottages upon irregular lines and at varying distances, in accordance with the topography of the site, so as to group the different types of patients. The ideals of those establishing the Colony were so high that mention is made of the "self-support of the inmates" through the natural advantages of Colony life. The epileptic of average mentality, or better, does, after a reasonable period of residence, show improvement in general health and oftentimes in regard to the frequency of seizures, mental state, etc. One of the greatest problems which the Craig Colony has had to meet has been providing proper care and supervision for those of its patients who show more or less mental impairment and in whom no improvement could be expected.

A 2,000-minimum capacity for the Craig Colony was originally planned for. The number of applications for admission has always exceeded the capacity. The report of the Colony for 1896 states, "Annoyance has been experienced by reason of lack of facilities for

making a classification of the patients committed to our care." This situation continues to a marked degree, especially as regards mentality and age. Craig Colony should receive only epileptics and not imbeciles and idiots in whom a seizure is but an occasional incident. In justice to all concerned, the persons should be sent to the institution planned to care for those with his outstanding symptoms. Craig Colony was never intended to receive some that have been sent. It was intended to treat epileptics in whom there was a possibility of effecting improvement. This means insight and cooperation on the part of the patient, and it cannot be had without a fair degree of mentality.

The Colony lacks cottages for patients of fair or good mentality who for one reason or another require close supervision for a temporary period. At present it is necessary to place these patients in the same cottage with the markedly defective type. Among epileptics many of attractive personality, who, preceding and following seizures, have a mental upset, more or less prolonged, which demands they at that time receive closer supervision than is ordinarily necessary, and be segregated and protected from irritating influences. During such periods of aberration these patients exhibit the same symptoms as many of the insane, therefore, they should have the same humane care.

Contrary to the assertion of some writers, only a small number of the epileptic or mentally defective are essentially delinquent or asocial. Most of those showing such tendencies became so because of early environmental influences.

Cottages to permit of proper classification minimize undue friction, and promote a quiet and more peaceful atmosphere, thus tending to relieve excitement and lessen seizures. Patients of better mentality would be given larger opportunities to effect adjustment, without which restoration to health cannot be expected. Suitable living accommodations help patients to acquire confidence and make continued effort toward helping themselves, which cooperation is most necessary to obtain beneficial results.

The reasonable discipline of institutional life, if applied early in the disorder, is especially valuable for many who have been allowed their own way, irrespective of consequences. Recreation, both physical and mental, occupation and rest in proper proportion are primarily part of treatment.

The majority of epileptics in institutions exhibit some mental abnormality, varying in individuals and from time to time in the individual. Some have recurring periods of mental disturbance lasting for hours, or even days and weeks, after which they return to their usual mental condition. In others, progressive deterioration occurs with evident lessening of mental acuity. Ordinarily, however, epilepsy and primary feeble-mindedness when associated are but concomitant signs of a defective make-up, either congenital or following some disturbance in early life resulting in damage to the central nervous system. The good of the greatest number being considered, the average colonist can be allowed reasonable liberty and granted various privileges consistent with his mental state. In my experience, the average epileptic is not quarrelsome or irritable to the degree often asserted.

If structures for the more defective and deteriorated types are placed at some distance from the buildings occupied by brighter patients, and partly or completely hidden from view by trees or an elevation of land, there should be no serious objection to having all types in one institution. Proper classification is of utmost importance, not only for care and treatment, for study and research, but for easier administration.

Because of abrupt impairment or loss of consciousness recurring in epilepsy, the buildings for patients should not be over two stories in height, nor too large, those for brighter patients accommodating from 15 to 30, and for lower mental grades somewhat larger. Per capita cost for maintenance in the smaller cottage, with its closer approach to home life, is practically the same as for the larger cottage for the helpless class where a much larger supervisory force is required. For ease of supervision and general simplicity, one-story structures, especially for the more helpless types, are preferred. It does not seem that the one-story cottage would need to be as costly in proportion as that of two stories.

I remember seeing in England in a hospital for epileptics padded rooms for special cases. From my experience, I believe that any epileptic can be suitably cared for at any time if adequate nursing facilities are available.

Separate groups should have a central kitchen and dining room, but for the smaller cottages for the most promising patients separate dining rooms should be maintained so as not to disturb classi-

fication. Beside the administrative group, an institution for epileptics should be divided into two principal parts, separating the sexes, each of these larger groups being subdivided as follows: (a) group for the better mental grades; (b) group for middle grade, many of whom are good workers; (c) group for psychotic epileptics, provision being made for both acute recurring cases and chronic cases; (d) isolation cottages for tuberculous and those having communicable diseases; (e) infirmary group, with adequate sick wards, for low-grade patients; (f) for males, one or more farm colonies.

In cottages for the acutely ill, which includes those in a disturbed mental state, and in small cottages for the brighter class, there should be a few single rooms for patients, but otherwise small wards are to be preferred for better supervision, both by attendants and by fellow epileptics, whose assistance must be availed of.

The smallest possible amount of construction to afford opportunity for injuries during seizures is essential. Stairways should have gradual ascent and high railings. All corners and projections should be rounded. Toilet rooms should have water closets exposed to permit supervision, partitions and doors on individual sections being contra-indicated. Buildings easy of ingress and egress are ideal for any class of defectives, but especially for the epileptic, subject as he is to disturbances of consciousness. Machinery must be provided with proper guards. All steam and hot-water risers and radiators must be covered or the latter placed high on the wall. Installation of indirect heating is desirable if funds permit.

Occupation offered colonists should be most varied as the epileptic of fair to good mentality can, under proper direction, pursue any ordinary avocation barring one dangerous to him because of his seizures. Work is an especially valuable treatment, carefully regulated occupation seeming oftentimes to lessen the number of seizures and prevent mental deterioration. The type of employment should, if possible, prove interesting, and in many cases must be of a character different from that pursued previous to admission.

The patient must realize the value of occupation, physically, mentally and morally, appreciating that everyone must follow some pursuit in order to continue in health. New interests must be aroused, opportunities given for more outdoor exercise, active use of the muscular system developed and interest sustained in pursuits.

Often there has been deprivation of some of the ordinary opportunities for energy outlets. Unless there is a good reason to forbid, the patient should be allowed to participate in the doings of his circle. I have found even in those of a high grade of mentality, that by reposing confidence in them and exacting a certain amount of responsibility much benefit results. Unfortunately, many have been badly advised regarding this particular phase of treatment, and in consequence are averse to pursuing it, urging fatigue, disinterest, etc.

In the institution carefully selected patients can accomplish much, but even with the best the handicap of abrupt attacks of impairment or loss of consciousness, often without warning, precludes the possibility of their being depended upon to the degree possible with selected cases among the insane, feeble-minded, etc. Because of this disturbance of consciousness, epileptics cannot ordinarily be placed in branch colonies unless located immediately adjacent to the main institution.

The earning capacity of the institutional epileptic has been overestimated by many, even by some familiar with their special care. In the average colony, about 50 per cent are capable of doing labor of some kind and from 10 to 15 per cent considerable work when not incapacitated by seizures. Diversions are therapeutic measures primarily and for entertainment secondarily. Various games and sports, both indoor and outdoor, are encouraged for obvious reasons. Industrial departments are for monetary return less than for therapeutic value.

In the open colony, with a maximum of liberty for the majority a patient occasionally takes advantage of such privilege and departs without leave, sometimes while automatic or confused. Minimum custodial care is sought for to effect a satisfactory improvement in the health of the colonists. Relatives and friends of patients are often at fault, as by their manner and attitude patients are influenced to run away.

Newly admitted patients at times fail to adapt themselves to their unaccustomed environment. Suffering from nostalgia they become discontented and dissatisfied, not finding conditions as represented by relatives or friends in inducing them to come to the institution.

If facilities for classification were improved, more of the brighter

and more recent cases might be expected to apply for admission. Some applicants and their families are unreasonable in what they demand of a public hospital maintained at a much lower daily cost than the urban general or private hospitals. Recently the Colony was criticised because it was not in a position to furnish patients with private room with individual bath. When patients are admitted to the institution, the place of previous residence has a bearing on the difficulty or ease of adjusting to Colony life, the greater change in social contacts and abridging of former privileges, the conforming to rules, simple as they may be, and associating with others of all grades of mentality, different racial origin, etc., adding to the burden.

Reasonable opportunities for relatives and friends to visit patients and the assignment, so far as means permit, of compatible patients in each cottage, are demands which should be met. Close study of the recent arrival is necessary to bring about his proper readjustment to his new and oftentimes strange environment. He may never previously have seen another epileptic having a seizure, never have been under discipline, and prior to his admission may have been heavily dosed with sedatives, harshly treated perhaps for incidents resulting from his disorder and deprived of the broad perspective of what his condition is and what he himself must do and accept if an improvement is to be sought.

With suitable provision available in an institution, it is possible to readily acquaint newly admitted patients with the purpose of the institution, and the necessary rules governing its inmates, so as to place him in better harmony with his new environment, make him feel he is the subject of consideration and allow the physician in charge of the admission service to have an insight into the personality of the individual in a way not possible later. During this trying time, patients do not always appear at their best. It should be remembered in this connection that many normal people find it difficult to become reconciled to change in surroundings and that some of the reactions presented in the newly-admitted patients are common to the majority of mankind. Applicants mentally incompetent should be committed through a proper court, but those who are normal should be received as voluntary patients, and upon short written notice permitted to leave. Many physicians, social workers and poor-law officers do not recognize that a number of

epileptics are quite normal mentally, in this respect being no different from ordinary individuals. The statement is sometimes made: "The mentality is normal for an epileptic." What does this mean? The outlook for the epileptic of normal mentality is quite good, if put under proper care at an early period of his disorder, and the care of such a patient is much easier and more pleasant, adding materially to the encouragement of those working in the institution. This latter feature should be given earnest consideration.

Every legitimate means of publicity should be employed to encourage epileptics and those interested in them to place this class under early proper guidance to effect such change in mode of life as may be indicated. It is essential the patient have normal interests to arouse and sustain mental activity, and all possible opportunities to offer normal energy outlets.

Extension work for epileptics and following up discharged patients is not given sufficient recognition. Craig Colony was a pioneer in requesting field workers, but unfortunately, without success. Failure to acquaint the applicant of better mentality with the reason for entering the Colony may cause loss of confidence in relatives, give rise to suspicion of those persons and also the institution, and result in difficulty in effecting a readjustment to the new environment.

Unrecognized epilepsy, particularly the mild type, results in great danger not only to the individual but the community in which he resides, e.g., especially when present in motormen, engineers, chauffeurs, barbers, etc.

Regarding marriage of epileptics, such must be decided upon the individual case record. Sentiment defeats sense oftentimes when the question of marriage of an epileptic arises. Some assert that epileptics are hyposexual, therefore seldom marry.

When the epileptic is permitted to assume the responsibility of parenthood, as time goes on, deterioration occurs in many and there presents the problem of not only caring perhaps for defective offspring but for the defective parent.

The majority admitted to Craig Colony not only have epilepsy but general defectiveness, therefore improvement may be looked for in comparatively few. Many discharged improved, 17.7 per cent, could have been included under recovered, but the duration of

freedom from symptoms was not considered sufficiently long. No matter how well they may otherwise be, patients are not discharged as recovered until free from seizures for two years; and others might have been benefited if they had remained for a reasonable period. The longer the freedom from seizures and the better the adjustment to an ordinary environment, naturally the better the prognosis. Carelessness in mode of life may result in recurrence of seizures in the most hopeful case. To bring about improvement there must be only disturbance of function of the central nervous system and related organs, and no permanent destruction of a portion of these tissues. Seizures may be controlled, but a mind which has never developed or one definitely deteriorated cannot be restored. The particular patient must be considered as a whole and not solely as a person presenting types of seizures.

For readjustment of his life, it is necessary to individualize treatment along lines of common sense, undue worry, embarrassment and distress tending to rather provoke than bring about an abeyance of symptoms.

School work at the colony is important, not only giving to patients of suitable age the same opportunity afforded school children elsewhere, but having material bearing on treatment of their epilepsy. While some being mentally subnormal cannot take full advantage of educational opportunities, nevertheless, the school affords outlets which, normal in themselves, tend to benefit all its pupils.

In the present plan of cooperation, the Geneseo Normal School students are given opportunity for personal observation and application of methods used in teaching problem children.

Some speech abnormalities observed in epilepsy are apparently due in part to the general make-up of the individual and in part to faulty training, for the reason that many who have this disorder are deprived of school opportunities. So-called plateau speech is not as commonly seen in large groups of epileptics as has been asserted.

Many epileptic children have potential mentality permitting of response to educational opportunities, not only with handwork but academic studies, thus assisting in general mental development as well as tending to ameliorate their disorder and prevent mental deterioration. Habits of discipline and self-control will be incul-

cated, interests aroused and developed, and encouragement given, thus resulting in assurance.

Epileptic children in the community are through prejudice avoided or derided and feared by other children, both in school and at play, and often experience no sympathy from older persons. In the home, too solicitous care and false pride, seeking concealment, often forces upon epileptic children invalidism, both physical and mental, making almost certain mal-adaptations, retarded development and subsequent deterioration. Epileptic children cause much anxiety and worry in the family, partly due to witnessing their seizures, especially severe convulsions, partly to the possibility of complications and injuries occurring during the attacks, and partly to the child with normal instincts being prevented from participation in the activities of childhood.

Parents of some epileptic children show evidences of mental instability, and are obviously unsuitable to care for their epileptic offspring. In the families of epileptics may be found potential epileptics possessing the poor judgment, obstinacy, bad temper and instability associated with the epileptic temperament.

There is no substitute for good home care and the attention which the growing child receives from normal parents. An institution cannot do more than approximate the normal home environment. The epileptic child should be permitted to remain in his own home and in the community, unless his condition is made worse because those coming in contact with him fail to appreciate why certain unusual or marked reactions occur. If the home is satisfactory, parents should not be relieved of their rightful responsibility for the care of their child.

Dr. J. Tylor Fox, writing on the care of selected epileptic children at the residential Colony at Lingfield, Surrey, states, "Children present a more hopeful problem than the adult epileptic, both because the epilepsy is more recent and the fit habit consequently not so firmly established, and because the slow process of mental deterioration is not yet much in evidence."

"Leaves of absence unfortunately allow a child, benefiting by Colony life, to return to the environment in which his fits arose, court a recurrence of fits if they have ceased, or an increase if they have lessened. Such holidays interfere with rhythmic life, an important factor in the epileptic environment."

Many disadvantages of home life are absent in a Colony where seizures, instead of looming large to cause consternation and excitement, are accepted as ordinary occurrences.

Dr. Fox further writes, "The Colony is to segregate and educate children whose presence in ordinary schools is undesirable. The most favorable period for arresting seizures is often past by the time they arrive in the special institution. Cases with few seizures and of recent onset should have preference for admission, for it is among these that the probability of arrest is greatest." At the special residential school for epileptic children at Lingfield, another near Manchester, and others, it is possible to care for English epileptic children. So far as I know, there is no institution in the United States of the type of these schools.

The State having assumed the responsibility of caring for the insane, feeble-minded and epileptic, must furnish adequate facilities, an essential one of these being training of nurses. All that can be done to relieve the uncongenial setting of the nursing force in our State institutions should be accomplished. It is bound to make for efficiency and ultimate economy. Epileptics and insane are like other people when sick and require just as efficient care as patients in any hospital. Another dominant reason for developing our training school is that for nurses trained in general hospitals life is too irksome, strenuous and monotonous in institutions, as remotely located as the Craig Colony.

Dr. L. Pierce Clark believes public colonies should be training schools for social workers, engaged in educational and religious work pertaining to care of nervous and mental cases, especially epilepsy; and colonies should train epileptics so they may reside in their own homes and perhaps be supervised by district clinics, those in whom there has been an arrest of seizures to remain under supervision after leaving the Colony, thus preventing many relapses. How this after-care can be best inaugurated is still to be carefully considered.

Clark suggests "to combat deterioration or bring an arrest, we must strive to implant in the epileptic a spontaneous desire to find satisfaction in occupation without direction. He cannot be induced to change his character entirely. He fails because he cannot appreciate the environment in terms of its own qualities and the qualities that may be read into it by the individual. The attitude which

parents, relatives and society take toward the epileptic encourages his memory failure, and the restrictions and prohibitions thrown around him for safety from injury in the infrequent attacks limit seriously a wide and vivid appeal of objectivity."

Bear in mind that the average epileptic is capable of only about one-third a normal person's capacity for prolonged physical or mental effort. At the Craig Colony, the organization of a club for male patients has done much to modify some of the outstanding unsocial symptoms seen in many epileptics.

Luminal seems to control to a considerable extent the occurrence of the severe type of seizure. Its influence is perhaps more marked in older patients. In reasonable dosage, no ill effects have been observed from its administration to patients at the Colony. Bromides have a much narrower field of usefulness than was formerly held. Properly administered, they may benefit some epileptics, but their indiscriminate use has resulted in untold harm in the past, when it was not appreciated that epilepsy is a disorder of the whole individual and not of any one organ.

In seeking to improve the function of impaired tissues with limited power to meet various conditions arising either normally or in various diseases or disorders, drugs can but supplement a carefully regulated way of living.

The loss of memory and blunting of intellectual functions often ascribed to sedatives, may be mainly secondary effects of their repressive action on the fits, a stoppage of the fits by whatever means may be associated, for a time, with unfavorable symptoms; it is the cure and not the bromide that must be blamed.

Ordway reported in 1916, that 9 per cent of the patients treated in the Neurological Clinic of the Massachusetts General Hospital were epileptics. Many had acquitted themselves well in school life. Some whose school work had been below the average, later proved capable of earning a livelihood in an industry. The schooling of some had been above the average but because attacks interrupted work of classmates, the unfortunate children were barred from school. An industrial investigation showed that the greater number lost jobs on account of the character and frequency of attacks rather than inefficiency. Some were able to keep jobs because they had gained skill in some particular industry previous to onset of the illness, and were able to cope with whatever slight danger

attended employment. Forty per cent were regularly self-supporting, 2.3 per cent contributed regularly to the support of others, and some were periodically self-supporting. Dr. Ordway suggested establishing work shops for epileptics, as has been developed for the blind, crippled and others physically handicapped, pointing out the favorable influence of suitable employment on the mental state of epileptics. Kindly cooperation of employers would enable many epileptics to become engaged in general community industries, without the need of concealing their disorder.

Oftentimes a change of environment with new social contacts offering better energy outlets and attractive incentives for sustaining interests in life's activities is beneficial to all mankind and particularly so to those with disorder such as epilepsy with its many phases. Again I would ask you to bear in mind that the reactions we call epilepsy differ only in degree or shade of color from reactions general to all the human family.

There is no specific treatment for epilepsy. The majority of epileptics, if to receive medical supervision, must be looked after in the community by neurologists or general practitioners. The average clinic patient must be referred to such physicians for continued medical advice.

If at the present time there are, conservatively speaking, over 30,000 epileptics in New York State, 10 per cent are receiving treatment in State institutions of various kinds. If additional epileptics are to be ultimately cared for in special institutions, e.g., removing to the Craig Colony or similar institution many epileptics now in the State hospitals, then after expanding the Craig Colony to a capacity of at least 2,000 or perhaps 2,500 patients, it will be necessary to establish an additional institution, perhaps nearer the Metropolitan district.

Serious consideration must be given to arranging so that younger epileptics of fair to good mentality can remain in their respective communities, participating in the life of the same. Many of these can receive necessary advice and direction from practicing physicians or proper clinics.

The problem in New York State with its cosmopolitan population is even greater than in European countries where practically all patients in a particular institution are largely, if not entirely, of the one race and largely from the same social class.

In this connection, I might mention that the present overcrowding of the Craig Colony is given as 8.77 per cent, the actual capacity being 1,432 with a population of 1,581. Money now available from bond issue allocations will increase the Colony's capacity but little, perhaps 200 beds. At present the Colony has 140 applications on its waiting list.

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THE CLINICAL DIFFERENTIATION OF THE FUNCTIONAL NERVOUS AND MENTAL DISORDERS*

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In discussing the problem of the clinical differentiation of the so-called functional types of nervous and mental disorder, I do not intend to go into any detailed analysis of symptoms or of their specific value in what is customarily called differential diagnosis; instead, I would like to discuss in a rather broad way some of the implications, which studies in recent years and current psychopathological formulations hold for our general conception of the existence of clinical entities and disease groups among the functional or biogenetic types of mental disorder.

Psychiatric thought in this country is still very largely under the domination of the Kræpelinian school. Just 30 years have elapsed since Kræpelin introduced a new idea in psychiatry and developed a new method of study of clinical problems; the almost immediate result was to bring some measure of order into the chaotic situation then surrounding the clinical classification of the large mass of excitements, depressions, delusional states and various forms of dementia.

Kræpelin's contribution was the use of prognostic principles for the formation of clinical groups. Basing his conclusions on the study of the entire course and outcome of cases of mental disorder, he maintained that if one made a sufficiently thorough and painstaking study of the cases in their early stages, one could invariably detect certain symptoms which indicated either a good or bad prognosis; he thus attempted to circumscribe two chief forms of mental disorder, namely, manic-depressive psychosis, a recoverable type, and dementia præcox, a deteriorating type. These he regarded as fundamentally different and distinct diseases.

Clinical experience later taught us that while the symptomatological distinctions which Kræpelin put forward allowed a certain number of cases to be sized up with a fair degree of accuracy as to prognosis, yet in numerous other cases neither a satisfactory clinical differentiation nor a reliable forecast as to the future course

* Presidential address, New York Neurological Society, February 1, 1927.

could be made. Many cases presented puzzling combinations of symptoms of both a benign and pernicious character; in some cases deterioration seemed imminent or even established, yet recovery took place; many cases which at first presented an apparently favorable outlook later developed unfavorable symptoms and deteriorated.

Kräpelin's own difficulty in circumscribing the two groups was well illustrated in the reports from his own clinic; for instance, at the Heidelberg Clinic dementia præcox rose to include 52 per cent of all the cases admitted, then later the number fell back to only 18 per cent of the admissions. Manic-depressive naturally swung in the opposite directions. Later at the Munich Psychiatric Clinic Kräpelin placed less than 10 per cent of the admissions in the dementia præcox group.

Particularly striking was the study of Zendig who investigated the later history of 468 cases diagnosed dementia præcox by Kräpelin himself. It was found that 29 per cent of these cases, in view of their subsequent course, had to be finally placed in the manic-depressive group.

It will perhaps be of interest to refer at this point to the experience in the New York State hospitals where for many years careful clinical statistics have been compiled on the diagnostic groupings of cases under observation.

TABLE 1. RELATIVE FREQUENCY OF THE BIOGENETIC CLINICAL TYPES
AMONG 7,435 HOSPITAL PATIENTS
(First Admissions)

	Per cent
1. Manic-depressive	14.1
2. Involution melancholia	3.1
3. Schizophrenia	27.7
4. Paranoia	1.0
5. Psychoneuroses	1.5
6. Psychopathic personality	1.7
<hr/>	
Total	49.1
All other psychotic types	50.9

The accompanying Table 1 shows the percentage distribution among the admissions of the clinical types under discussion. The 7,435 cases represent patients admitted for the first time to the New York State hospitals during the hospital year ending June 30, 1925.* Schizophrenia comprises, by far the largest group; manic-depressive ranks second; while involution melancholia, paranoia, the psychoneuroses and psychopathic personalities constitute relatively small groups. From this tabulation it appears that the so-called functional types, or as I prefer to designate them, the biogenetic clinical types, comprise altogether a fraction under 50 per cent of the admissions, while all other psychotic types, including the organic, toxic and somatic groups, constitute the other 50 per cent.

In the New York State hospitals the Kræpelinian principles of clinical diagnosis have been very conscientiously applied for many years. The conditions have been rather favorable for testing the practical validity of Kræpelin's claims. We have had the advantage of prolonged hospital observation and study of the cases, of the collaboration of the entire staff in making clinical diagnoses, and of a follow-up parole system—all of which would tend to eliminate mistakes and correct any personal bias or prejudice which individual physicians might even unwittingly exhibit in their clinical interpretations.

* Pellock, H. M., report of Bureau of Statistics, State Hospital Commission, June 30, 1925.

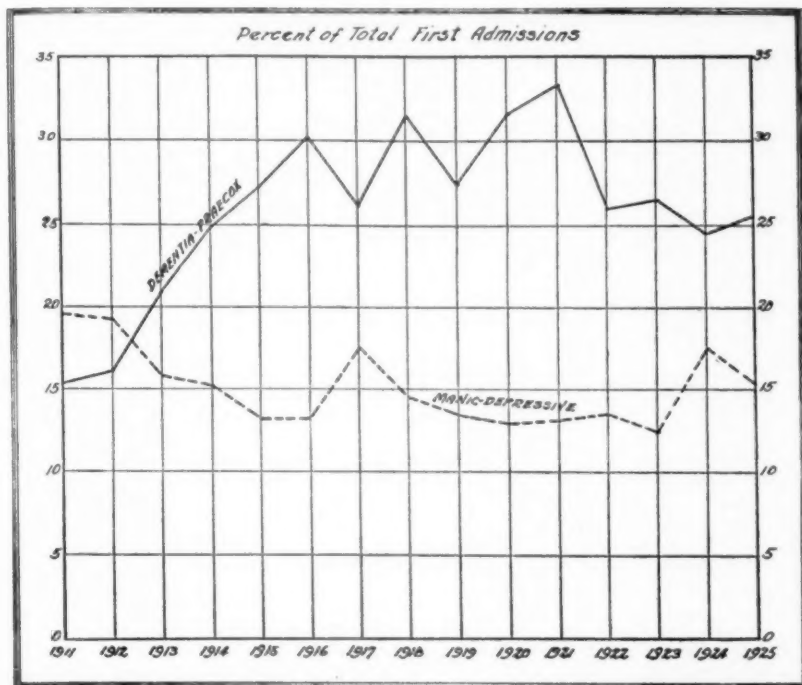


CHART I

TREND OF DEMENTIA PRÆCOX AND OF MANIC-DEPRESSIVE FIRST ADMISSIONS TO
MANHATTAN STATE HOSPITAL, 1911-1925

In Chart I the curves are plotted to show the percentage distribution of dementia præcox and manic-depressive among the first admissions to the Manhattan State Hospital during the past 15 years. In a general way one sees that the manic-depressive curve fell very sharply from 1912 to 1915 since when there have been episodic rises of some magnitude. The dementia præcox curve, on the other hand, at first rose very abruptly with a number of rather marked oscillations, but it will be noted that since 1921 it has fallen quite precipitately.*

The curves in Chart II represent the trend of clinical groupings, manic-depressive and dementia præcox, established by averaging the figures for all of the 14 State hospitals. We deal here with much larger numbers than when considering an individual hospital and the averages obtained would tend to correct variations due to any

* In all of the charts presented the cases which prior to 1917 were classed as "allied" to dementia præcox or "allied" to manic-depressive, have been included in the respective groups of dementia præcox and manic-depressive.

local condition in different hospitals or to actual differences in types of cases admitted—we know, for instance, that the admission rate of dementia præcox is much higher in cities than in rural districts, and somewhat higher for males than for females.

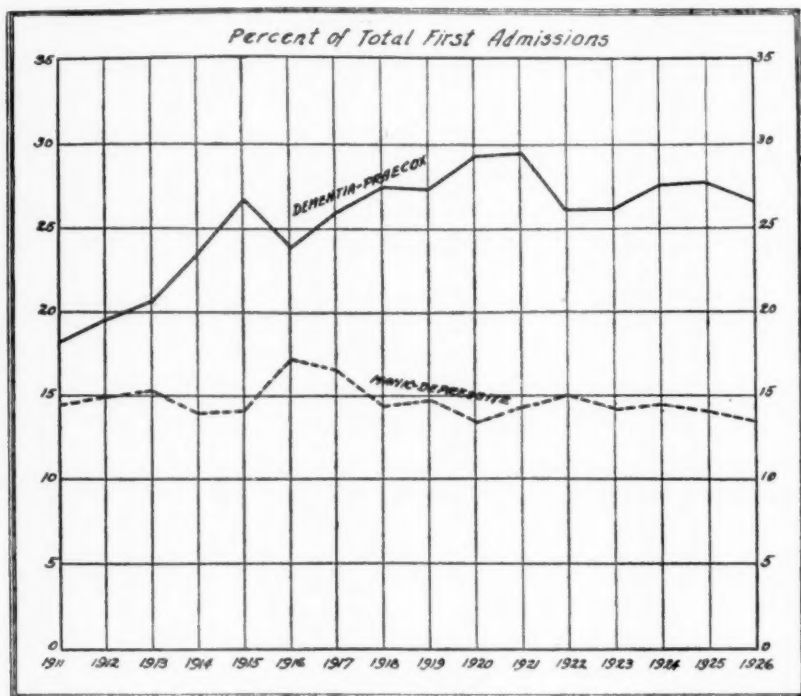


CHART II

TREND OF DEMENTIA PRÆCOX AND OF MANIC-DEPRESSIVE FIRST ADMISSIONS TO
NEW YORK CIVIL STATE HOSPITAL, 1911-1926

Considering, then, the figures for all of the State hospitals together, as shown in Chart II, it appears that the manic-depressive curve, the lower one, has not shown any very remarkable fluctuations aside from a rather noticeable rise between 1915 and 1918. During the past 9 years it has varied rather narrowly between 13 and 15 per cent. The dementia præcox curve, the upper one, has on the contrary, shown a wide variation, pursuing quite a striking upward course in its rise from a low of 18 per cent to a high of nearly 30 per cent.

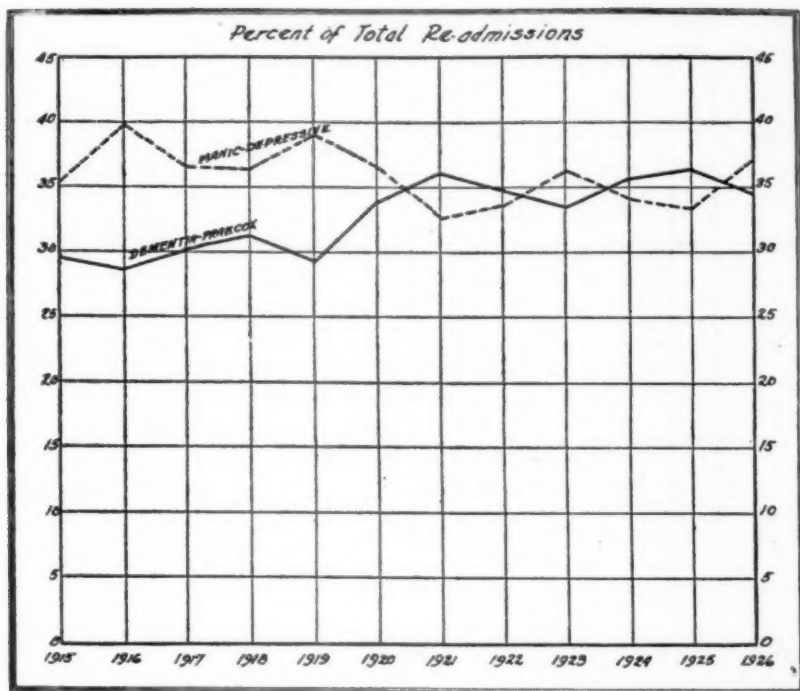


CHART III

TREND OF DEMENTIA PRÆCOX AND OF MANIC-DEPRESSIVE READMISSIONS TO
NEW YORK CIVIL STATE HOSPITALS, 1915-1926

Chart III shows the relation between manic-depressive psychosis and dementia præcox among the readmissions averaged for all of the New York State hospitals. An interesting fact brought out by these curves is that during recent years dementia præcox has ranked as high as manic-depressive among the readmissions. This probably is to be related to an increase in the number of cases of dementia præcox discharged following the development of the parole and social service systems throughout the hospitals.

If the foregoing curves are compared with those plotted for the well-established organic groups of general paralysis and senile psychosis, it will be seen that these organic types are subject to no such wide fluctuations as are recorded for the biogenetic types—that is to say, the clinical differentiation of the organic types is not in any such vague or unsettled state as in the other groups under discussion. This is shown on Chart IV.

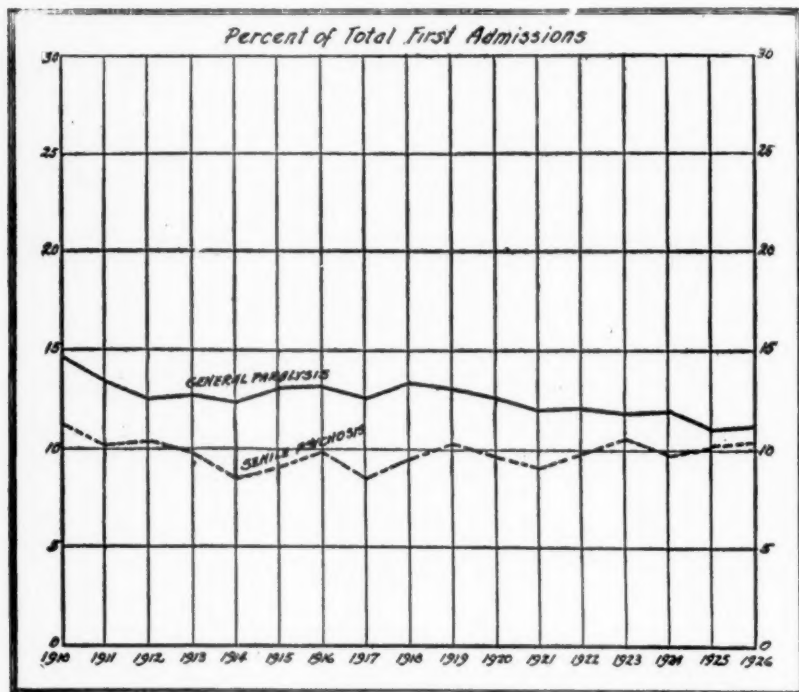


CHART IV

TREND OF GENERAL PARALYSIS AND SENILE FIRST ADMISSIONS TO NEW YORK
CIVIL STATE HOSPITALS, 1910-1926

The question as to what other types have been absorbed into the dementia præcox group during its rise is an interesting one, but I hardly have time to go into this. I will only point out that the statistics show that the group of paranoic conditions or paranoia has diminished somewhat, as also has the group of psychopathic personality, but these have probably not had any marked influence on the ratios as they have always been relatively small groups. The psychoneurotic group is also a small one among State hospital admissions.

There was, however, one other rather large group that showed a decided fall during the rise of the dementia præcox group. I refer to the alcoholic psychoses. The alcoholic curve, as shown on Chart V, declined steadily except for an exacerbation during 1916 and 1917, to its low point in 1920, the year which marked the advent of prohibition; since which time the alcoholic curve has risen steadily.

It is difficult to say whether or not there is any close relationship between the opposite tendencies of the two curves—especially the rise of the dementia præcox ratio and the fall of the alcoholic. We do know that alcoholic hallucinoses and alcoholic paranoid states contain many features in common with schizophrenic types of reaction. It is quite possible that more of these cases than formerly have been included under the diagnosis of dementia præcox because they are not so often complicated by alcoholism and therefore are more apt to be classed directly with dementia præcox.



CHART V

TREND OF ALCOHOLIC FIRST ADMISSIONS TO NEW YORK CIVIL STATE HOSPITALS,
1909-1926

Looking back over the whole period of Kræpelinian psychiatry, it does not appear that any noteworthy advance has been made in clinical differentiation of the groups under discussion since Kræpelin's original formulations 25 to 30 years ago. Kræpelin, you will recall, reduced dementia præcox to a primary disturbance of the will and the emotions, but offered no reason as to why the

volitional and emotional sides of mental life were so fundamentally disordered except his hypothesis that a selective brain lesion existed in certain cortical layers, due perhaps to some deleterious substance generated somewhere in the body, possibly in the sex glands. In a similar way, manic-depressive psychosis was conceived to be a disorder of the emotions, the psychomotor reactions and associative activity of the mind. As to why these functions were disturbed, one was left pretty much in the dark with vague suggestions of the importance of heredity and congenital disposition in determining the mental disorder.

Notwithstanding the early widespread acceptance of the teachings of the Kræpelinian school and the great impetus which was given to clinical study of psychiatric cases, little further progress appears to have been made in defining clinical types or discovering specific differentiating symptoms or prognostic signs. In fact, cumulating experience has tended to raise more and more doubt as to the validity of Kræpelin's disease entities, marked by characteristic symptoms and having a fixed course and outcome.

Various observers have long felt that the descriptive psychiatry of Kræpelin, in dealing with the groups under discussion, led simply to an endless cataloguing of symptoms without offering any prospect of a further differentiation of clinical types or a better understanding of the origin and meaning of the manifestations of mental disorder.

This kind of psychiatry proved to be especially deadening so far as any therapeutic endeavor was concerned. It is well known that as soon as a diagnosis of dementia præcox was reached, the hopelessness of the situation was at once accepted in harmony with the conception that a correct diagnosis settled the prognosis. Naturally, under the influence of this rather fatalistic doctrine, there was small interest in treatment. That no such attitude is justified is, fortunately, now more appreciated than formerly.

In recent years the problem of the inter-relationship of the clinical types under discussion has been approached from another direction. The older descriptive psychiatry has been gradually yielding to an interpretative psychiatry founded on a genetic or biological conception of these disorders.

In this country the first psychiatrist who attempted to formulate this conception was Adolf Meyer. He taught that a more promis-

ing and helpful line of approach to these conditions could be made if the idea of an underlying disease-process was dropped and more emphasis placed on the study of the patient from the standpoint of abnormal behavior; attention would then be directed to the factors or forces determining the behavior and the possibility of modifying these factors would then become an issue. The idea was stressed that we must seek in the patient himself for an explanation of his abnormal behavior. Most weight was thus placed on a study of the personality make-up, the instinctive drives, inner conflicts, habit reactions and special life experiences of the individual patient.

This early formulation by Meyer and the later contributions of other workers in this country and of Bleuler in Europe, contemporaneously with the work of the psychoanalytic school, have led the way to the development of a viewpoint in psychiatry of far-reaching importance. There is as yet no final agreement in the formulation or crystallization of this viewpoint. Different workers emphasize different aspects of the same conception, but they all agree in approaching it as a biological problem; it is, moreover, clear that further progress in psychopathology must rest on a study of the individual considered as a biological unit, an integrated organism endowed with certain purposive strivings toward natural goals. In mental illness these strivings are interfered with or are in conflict with each other--thus arise psychic reactions and behavior disturbances which constitute the symptoms of mental disorder.

It is not my purpose to try and present this conception in any completeness or detail. I only want to refer to the general principles involved in order to discuss the implications which this formulation holds for the problem of the clinical differentiation of the functional psychoses, neuroses and psychopathic types.

Strong support for the genetic or biological conception of these disorders has come from studies of the personality make-up or constitution. Most work has been done on the manic-depressive or schizophrenic types; from an analysis of the pre-psychotic mental make-up and affective reactions of patients in this group and also from a study of their families, together with observations made on normal persons, the conclusion has been reached that one may identify two distinct psychological reaction types which represent different biological tendencies in the human race. These are the syntonie and schizoid types of Bleuler, corresponding to the

extravert and introvert types of Jung, the syntrophic or idiotrophic types of Wertheimer. According to this theory, all persons whether sick or well possess both syntonie and schizoid components in their make-up, the predominance of the one or the other being determined by factors not yet understood, although heredity undoubtedly plays an important role. Either syntonie or schizoid tendencies may be morbidly exaggerated in an individual, resulting in a corresponding psychosis. When one reaction type is dominant with more or less complete suppression of the other, we have clinically a so-called pure manic-depressive or a pure schizophrenia. However, pure types are in the minority, so that most frequently one finds mixtures—for instance, cases with preponderating manic-depressive symptoms but also showing schizoid manifestations, or on the other hand, cases with schizophrenic symptoms leading, but also showing syntonie features.

Such mixtures or combinations have been known ever since the advent of Kræpelinian psychiatry with its insistence on regarding manic-depressive and dementia præcox as separate diseases. This explains why there has been so much divergence of opinion in clinical classification and strife over what diagnosis should be made. This difficulty is clearly reflected in the fluctuating curves shown of the diagnostic groupings of patients admitted to the hospitals.

Interest in this problem has been further stimulated by the work of Kretschmer on the relation of physical constitution to personality type and psychosis. His observations and those of others indicate that syntonie personalities and manic-depressive psychoses are most frequently associated with the pyknic physical type while schizoid personalities and schizophrenia have an affinity for the asthenic, athletic and dysplastic physical types. This is regarded as a biological relationship, but just as in the psychological types, so in the associated physical types there are mixtures and overlappings which are difficult to classify even when careful anthropometric measurements are applied as an aid in differentiation.

The clinical differentiation of involution melancholia has always offered many difficulties. Kræpelin originally described it as a separate clinical entity, but later brought it in relation to his manic-depressive group. Many of these cases, however, develop in schizoid personalities and, as shown in the study of MacCurdy, a considerable proportion of these depressions contain marked schiz-

ophrenic elements and run a chronic unfavorable course terminating in phases which cannot be differentiated clinically from the malignant forms of dementia præcox.

That no satisfactory clinical distinction can be made between paranoid dementia præcox, paraphrenia and paranoic conditions, is a fact long recognized by most psychiatrists. I have found that such diagnostic groupings depend largely on the personal preference of the physician. Even Kræpelin's so-called true paranoia, a supposedly rare affection, is seen to be essentially a schizoid reaction and clinically can not in any essential way be distinguished from the other clinical types under consideration.

That the group of psychopathic personalities, and the more marked psychotic and neurotic manifestations which arise in such individuals, offer no uniform clinical conception is generally recognized. One encounters here an infinite shading of reactions with transitions and combinations of syntonie, cyclothymic, schizoid, paranoid and neurotic features. Bleuler in discussing the clinical relationships between the psychopathic reactions and the neuroses, points out that different constitutional types, mechanisms and syndromes are interwoven and influence each other to such a degree that it is practically impossible to define clinical entities be it according to disposition, releasing causes, mechanisms, or syndromes. One can at best make only an artificial separation of clinical types which genetically and symptomatically usually intermingle or show transitions from one to the other.

The predominance of schizoid trends in the psychoneuroses has been especially emphasized by the work of Kretschmer. Bleuler also regards most neurotics as cases of latent schizophrenia, many of whom eventually deteriorate, while others, especially the compulsion neurotics, do not so often dement. In the State hospitals one encounters a considerable number of cases of chronic schizophrenia that in their early stages showed merely psychoneurotic syndromes which later on became more and more schizophrenic.

Brill, in a recent communication, expresses the view that all psychoneurotics are preponderatingly schizoid in make-up and finds that the compulsive types, even when they react well to psycho-analytic treatment and do not become patently schizophrenic, nevertheless always manifest deep-rooted schizoid traits.

In the problem of the clinical differentiation of the various types

under consideration the psychoanalytic approach has contributed important data and amplified the biological conception of these disorders. From the genetic standpoint psychoanalysis reveals no essential difference between the psychoses and neuroses, both of which, according to Freud, are the expression of a conflict of the same underlying forces.

The application of the libido theory, however, permits the separation of the two clinical groups, namely, the transference neuroses, the hysterical and compulsive types, and the narcissistic neuroses (or psychoses) which include schizophrenia, paranoia, depressions and manic states. According to this formulation, it is the disposition of the libido, the direction of its striving and its points of fixation in the different stages of the development of the individual which will determine whether the clinical reaction will take the form of a benign transference neurosis or the more pernicious narcissistic type of disorder. In the transference neurosis a positive or negative overflow of libido is possible, whereas, in the narcissistic type no such externalization is possible.

However, clinical experience teaches that these relationships are not absolute or rigid—we deal mostly with tendencies, with varying degrees of fixidity of the libido, not with clear-cut and definite types as one might think from some psychoanalytic discussions. The inter-relations are the same as in the syntonie and schizoid types of reaction, in other words, as Brill puts it, every neurotic has also a portion of narcissistic libido and depending on the quantity and perhaps also on the quality, he is either a frank transference neurotic or a mixed type or so deeply narcissistic that he has no capacity at all for transference.

If this conception is valid it would seem to indicate that one should expect to achieve all possible degrees of therapeutic results in dealing with the narcissistic types. I, personally, feel that too much pessimism has surrounded the analytic investigation of this group and that Freud's warning of the danger of making patients worse applies in the main to only certain types of cases of schizophrenia. Our experience with this group has been decidedly encouraging even in hospital cases when a modified form of analysis was used. We have, in fact, been surprised at the marked improvement and social adjustment attained by many patients in whom fairly deep regressive elements were present. Cases we have followed now for several years remain well.

Further advance along therapeutic lines seems to be indicated by the recent work of Clark in the use of his phantasy method. Wlder has also attempted to develop a method aimed to afford the patient facility to sublimate his narcissism or to make narcissistic identifications, the idea being kept in mind that the patient can love only on a narcissistic level.

In this hasty sketch of the problem of the clinical differentiation of the functional nervous and mental disorders, I have tried to indicate some of the limitations of the static, descriptive psychiatry of Krpelin and to show some of the reasons for its replacement by a more dynamic interpretative psychiatry based on a biological conception of these clinical types. I do not underestimate the value of Krpelin's work, which after all prepared the way for later progress. He really discovered the important biological reaction types which we now recognize, but he mistook them for circumscribed disease entities—manic-depressive and dementia prcox; he centered his description on the extreme cases, the institutional patients, without appreciating the widespread distribution of the milder types and mixed forms and their relation to other clinical groups.

The introduction of a dynamic, genetic conception in psychiatry has displaced interest from rather sterile descriptive problems to the more fruitful ones connected with the study and treatment of the individual as a biological unit. So far psychiatry has been mainly occupied with the psychological reactions of this biological unit, but it also has its organic or structural aspect and also its physiological and chemical aspect. All of these must also be studied and their inter-relations with the psychological panel established before we can grasp fully the complexities of either normal or abnormal human behavior.

THE PSYCHOLOGY OF MYTHOLOGY*

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"The prominent civilized nations, such as the Babylonians, Egyptians, Hebrews and Hindoos, the inhabitants of Iran and of Persia, the Greeks and the Romans as well as the Teutons and others, all began at an early state to glorify their heroes, mythical princes and kings, founders of religions, dynasties, empires or cities, in brief their national heroes, in a number of poetic tales and legends. The history of the birth and the early life of these personalities came to be especially invested with fantastic features, which in different nations, even though widely separated by space and entirely independent of each other, present a baffling similarity, or in part a literal correspondence. Many investigators have long been impressed with this fact, and one of the chief problems of mythical research still consists in the elucidation of the reason for the extensive analogies in the fundamental outlines of mythical tales, which are rendered still more enigmatical by the unanimity in certain details, and their reappearance in most of the mythical groupings."¹

Various theories have been advanced to explain the origin of myths, their development, and their significance, but there has been a wide difference of opinion. Malinowski in his book on "Myth in Primitive Psychology," quotes the anthropologists Burne and Myres as follows: "Myths are stories which, however marvelous and improbable to us, are nevertheless related in all good faith, because they are intended, or believed by the teller, to explain by means of something concrete and intelligible an abstract idea or such vague and difficult conceptions as Creation, Death, distinctions of race or animal species, the different occupations of men and women; the origins of rites and customs, or striking natural objects or prehistoric monuments; the meaning of the names of persons or places. Such stories are sometimes described as *etiological* because their purpose is to explain why something exists or happens." Malinowski maintains that this contains "in a nutshell all that modern

* Read before the Tuesday Club, Poughkeepsie, N. Y., February 14, 1927.

¹ "The Myth of the Birth of the Hero": Otto Rank: Jour. Nervous and Mental Disease Pub. Co.; 1914.

science at its best has to say upon the subject" and disagrees with the statements. He maintains that the savage myth maker does not "want to 'explain' or make 'intelligible' anything . . . above all not an abstract idea." He claims that the above definition "would create an imaginary, non-existent class of narrative, the ætiological myth." He claims that such "a definition would make it impossible either to see clearly the nature of myth or to make a satisfactory classification of the folk tales." His argument is that the explanation of myths requires observation of the carrying out on the ground, as it were, of the mythological practices, and of the diffuse-ways in which they enter into life. He goes on to describe certain practices of savage tribes that he observed. He maintains that the myth is above all a cultural force. He claims that "myths serve principally to establish a sociological charter, or a retrospective moral pattern of behavior, or the primeval supreme miracle of magic." Just what this means to the author is not clear. It is quoted to indicate the, to our mind, unsatisfactory or unsatisfying dissertations and discussions of anthropologists.²

Our attitude is that the myth or mythology in general is the product of the longings, cravings and wishes of mankind existing under varying conditions, and that they are analogous to the longings, cravings or wishes of children, to the dreams of adults, and to the delusional ideas of persons with mental disorder.

Ontogeny repeats phylogeny—the anatomical or physical development of the individual goes through stages similar to those passed through by man in his racial development. The mental development of the individual repeats the stages of the mental development of the race. The myths were the manifestations essentially of a primitive mind. The dreams and imaginings of children are similar productions. Civilization and culture have modified the usual mental activity of the adult, so that he thinks and acts differently in his normal waking state from primitive man or the child. We like to think of ourselves at the present time as having progressed by civilization and culture far beyond the development of the primitive mind or the child mind, but as a matter of fact, it requires little observation to demonstrate that culture or civilization are but a thin veneer over the essential primitive

² *Myth in Primitive Psychology*: B. Malinowski, *Morton & Co.*, 1926.

make-up of man. It requires only a war to bring out the predominant instincts of self-preservation, with a loss of the higher altruistic and social aims that we would prefer to believe have been well established in us. We revert then to a state of mind and activity little different from the instinctive activity of primeval man. Intelligence or judgment do not then control us, but we are dominated rather by our emotions and our instincts. The same reversion to the more primitive type is seen in the case of any panic or fire, or threatened death, or in the case of a mother upon threatened separation from her children. Man, every night as he dreams, reverts to the primitive. The individualistic state of activity is demonstrated by his dreams, which show his instinctive asocial or anti-social cravings, his resistance against the restrictive demands of society and his desire to carry out egotistically his own wishes. The same symbolism is used in these wish-fulfilling dreams that is seen in the myth, or in the waking day dreams of children.

Certain individuals are unable to adapt themselves to the restrictive repressing demands of society, these demands fundamentally preventing them from carrying out their egoistic instinctive wishes. Such individuals revert then to a more primitive or individual state of existence not only when they are unconscious in sleep, but in their waking states. It is these persons who, because of their disordered thought and behavior, are looked upon as mentally disordered, and are taken care of in the hospitals for mental diseases. Such regressions may be temporary, and the patients recover again their more normal socialized states of mind and be able to return to their communities, conducting themselves in conformity with the demands of society. Others, however, after they have once regressed to the more primitive state of mind, find such an existence apparently more in keeping with their abilities or with their desires and, lacking the necessary incentive or urge to again become civilized members of society, remain indefinitely in their regressed primitive state. Modern psychology and psychiatry with its latter-day observation, careful study and interpretation of the activities and thoughts of children, of adults in their dream states, and of these mentally disordered persons, have come closer to an understanding of the productions of the primitive man of prehistoric or early historic times, as shown in the myths. The person with a psychosis or mental disorder may be looked upon as living

often in a waking dream state and being controlled by his wishes and desires, which previously have been in the unconscious. The usual restraint of the conscious, more socialized mind, may be overcome by unconscious strivings when the power of control is lost through the use of drugs, physical disease or the occurrence of some event that has given particular strength or impulse to the unconscious wishes. It is not necessary, therefore, for us to go back to pre-historic or historic times for a study and interpretation of myths. We see the same manifestations every day in the observation of persons with mental disorder. The study and analysis of symptoms in such persons show that their productions or ideas represent instinctive unsatisfied ambitions, cravings or longings. These at times may be quite crude and free from the gloss of symbolism, as are some of the myths, but on the other hand in those persons who still have some evidence of a conscious or socialized restraint, symbolism covers up the more crude expressions, as it does in the myths.

As an example of the similarity between the myth, the child day dream, the night dream and mental disorder, with their same characteristics of wish fulfillment, we may discuss one myth that has had a special relation to present day mental manifestations. I refer to the so-called Oedipus myth which was dramatized by Sophocles. Briefly the story is that Laios, King of Thebes, who was childless by his Queen Jocaste, asked the Delphic Apollo for advice. The oracle told him that he might have a son, but that fate had decreed that this son would kill him. Oedipus, a son, was born and Laios three days after his birth had the infant exposed so that he would perish. The boy was rescued, however, by a shepherd who took him to the King of Corinth, at whose court he was brought up as the King's son. Oedipus learned accidentally that he was a foundling and asked the Delphic oracle for his own parents, but received the prophecy that he would kill his father and marry his mother. In the belief that this prophecy referred to his Corinthian parents, he fled from Corinth to Thebes, but on the way unwittingly killed his father, Laios, in a dispute. Upon reaching Thebes he solved the riddle of the Sphinx, and freed the city from the plague the Sphinx had cast upon it. He was given the hand of Jocaste, his unrecognized mother, as well as the throne of his father. By Jocaste he had four children, thus fulfilling the oracle. A plague visited the coun-

try as a punishment for his alliance. The oracle finally told the truth to Oedipus who put out his eyes, while Jocaste hanged herself.

The fact that this myth is one of the best known, indicates in the first place that it has attached to it a human interest. Today the recalling of it is apt to bring up feelings of repulsion; civilization has so strongly tabooed incest or physical relation with the parents. That incest was not formerly tabooed however, is evidenced by the frequent marriage of father and daughter or mother and son in ancient times among certain races. The taboo or prohibition against incest is perhaps best explained not on instinctive grounds, but rather on the ground of the best preservation of the race, incest relations resulting in an inbreeding and a consequent tendency to deterioration of the race. But instinctive desire for incestuous relations with the parent of either sex is still plainly evidenced at times in modern society.

For the boy the mother is the first love object who gives him that affection that he needs to satisfy his craving for love. The normal development of the boy leads to a breaking away from this attachment before it becomes of a frankly sexual nature, but the dreams and speech of children indicate clearly not infrequently that the mother remains the love object and that the father is the rival of the boy. The mother, on the other hand, is the rival of the girl for the father's affection. If this infantile affection or love for the opposite parent is not diverted to a person outside of the family, the child remains fixed in an infantile state of development, and may become neurotic or break down in a definite mental disorder. The dreams of children who have this fixation on the parent, show quite clearly the desire for incestuous relations in the dream; the rival parent is done away with by death or other means. In such nervous persons, however, a repression by the taboo of civilization usually prevents these desires becoming fully conscious or dominating the person in his waking state. Where the conscious control is not strong enough or where the unconscious striving is too strong the unconscious becomes the predominant factor and frank expression is given to the wish for incestuous relations, with marriage to the opposite parent, and the giving birth to children. Examples of such wish-fulfilling phantasies, usually called delusions, are prevalent among those who have mental disorder. For example, a girl observed by me several years ago had had a very marked attach-

ment for her father, and showed much distress when he died. She never had a real love affair. She got along very poorly with her mother to whom she showed a good deal of antagonism. Under a great deal of physical stress and strain she became much disordered in her activity, spoke at first of marrying a priest, whom we recognized as a father representative, but finally gave expression to the phantasies that previously had been unconscious, and spoke of marriage to her father. She always called her father by the name of Joseph, claiming that he was Crown Prince Joachim of Prussia, and that her real mother was Queen Elizabeth of Austria. Speaking of her father in this way she said "When I was 18 he married me. He gave me a little ring and said 'Give it to little Henry' (her brother). This did not mean that I would marry him, Henry, but Joseph" (her father). Again she said "Joseph really married me when I was 12, but did not tell me until he gave me the ring at 18." She said also that the monk, Rasputin, had frequently come to her in many forms and tried to ruin her. The monk was evidently a father symbol; she said that this monk had been married to the woman who posed as her mother. He was, therefore, identified with the father. This patient recovered from this acute upset, realized clearly that she had been mentally disordered, but was unable to explain why she should have thought of marriage to her father. This means that there had happened with her what frequently happens, a repression of the unconscious phantasies with an attempt to hold them in abeyance. The girl subsequently had another break down with similar production of wish-fulfilling phantasies.

Another patient who had likewise had a marked attachment to her father, developed a prolonged mental disturbance with denial of her parentage, ideas of influence and hypnotism, and developed a panic in the hospital when she began to hear voices, saying she was the daughter of William K. Vanderbilt; thought she had been kidnaped when she was 2½ years old, and at the same time she said "He, Wm. K. V., is screaming all the time. He wants to marry me. I was in love with Mr. H. I did not know he was my father. He says "Kiss daddy" constantly. My father objects to love treatment. They told me my father wants me to be his mistress. My mother and brother object to this, that would be terrible. My brother treats me for love—sexual love—the same kind of pleasure

that man and wife have together, that is the love that heals in science (Christian Science). My father wants me to come home and not marry, certainly he wants relations with me." She identified various doctors and science healers as her brothers and previously said that they had been familiar with her. She identified the physician in charge of her case as her brother, said "I don't know whether you are my brother or not. You don't confess you are my brother. I get communications to call you brother William, but if you are Dr. C. I won't. I did not act very ladylike the other day, trying to make love to you. If you are Dr. C. it was not, but if you are my brother it is. I hear it is the death bed for me tonight, treatment for love would prevent it. Relations with someone. There is no other way except you. I rather have them with you as a brother. I am receiving communications that you are to confess you are my brother. Love is the only cure for nervous trouble and heart trouble." This patient showed her uncertainty and conflict in occasional statements that she thought this might be insane talk. "If I heard anyone else talk this way, I would say they were nutty."

She showed a good deal of distress and tension, said "If I had a revolver I would blow my brains out. I would be better off than tortured by the ones that are torturing me." This represented feelings of guilt against her thoughts and expression and a desire to be relieved of them. She spoke at times of going to the gallows, because she was an impure woman. This patient recovered from this panic, was unable to explain how she could have thought such things and was able to leave the hospital, although she did not recover sufficiently to be self-supporting.

Another woman patient, at present 55, who had been quite intelligent, having a classical and musical education with broad travel, and finally training as a nurse, never married and showed no interest in men of her own age. She was much attached to her father who died some years ago. She then nursed an elderly man who took the father's place in her affection. She was adopted by him and lived alone in the country with him. They awaited the coming of the Messiah. The foster father died but she refused for several days the neighbors' entrance to the house, insisting he was not dead, and gave him up with a good deal of protestation. She then lived a primitive, isolated life, wearing few if any clothes and paying no attention to the care of her house. In addition to calling herself

the daughter of a former President whom we recognize as the father substitute and denying relationship of her own brothers, she describes herself as follows: "I am a Eunice, in other words non-sexed. I rank as a non-sexual—since my youth, before that I was a sort of combination, male and female. My male part was a sort of Knight of Columbus, a crowned cobra. I was sealed and clamped. A sealed and enclosed garden. That was done when I was a child. In the feminine I was a vestal virgin and in the male a knight. You understand about the various degrees, the Steve Does, Knights of Pythias and the Knights of Columbus. I am in love with the holy spirit. My mother was really my father, somewhat like myself, being doubly involved. She didn't bring me up because she travelled around and then like myself the male predominated. There was a comely Christian woman in the house who brought me up." She evidently, therefore, does away with her mother as such; identifies herself with the father, is a part of him; avoids any thought of normal marriage by believing that she is as much man as woman and does not, therefore, have to adjust herself to the normal civilized adult matrimonial situation. She has had children, however, in her fancy. She says "I have grown sons, I have no idea how many. That's something you will have to consult the clans about. I never gave birth to them. I include them in my heart and soul and spirit. You will have to consult the clan, our respective families about them." When asked who the father of these children was, she said "Mostly United States senators." The senators stand for old men respected and admired and are symbols or substitutes for the father. She associates her father with senators. One cannot imagine this woman being attracted to men of her own age.

In the Oedipus myth itself the feeling of guilt about incestuous relations is demonstrated in the disaster that follows it; that is—the plague on the city and the blinding of Oedipus' eyes, and the death of his mother wife by hanging. Our argument is that this myth appeals to persons as having a human interest because it appeals at the present time to the heart or feeling, and arouses the interest because of its identification with the interest of us as children and grown adults in the desire for the opposite parent, such interest having been repressed and tabooed, and only coming out

at times in dreams or in delirious or other abnormal mental states. Our argument is that the myth originated from such primitive feelings, perhaps crude and uncensored at the time of the origin of the myth, but more censored in the later development, as shown by the feeling of guilt in the moral teaching at the end of the tragedy.

It is impossible to refer in detail at this time, of course, to many of the most interesting myths and legends, or to try to interpret them. We may refer briefly, however, to the myth of the birth of the hero, duplicated in the legends of various races, and exemplified in our own Christian religion.

"Probably the oldest transmitted hero myth in our possession is derived from the period of the foundation of Babylon (about 2800 B. C.) and concerns the birth history of his founder, Sargon the First. The literal translation of the report, which according to the mode of rendering appears to be an original inscription by King Sargon himself, is as follows:

"Sargon, the mighty king, King of Agade, am I. My mother was a vestal, my father I knew not, while my father's brother dwelt in the mountains. In my city Azupirani, which is situated on the bank of the Euphrates, my mother, the vestal, bore me. In a hidden place, she brought me forth. She laid me in a vessel made of reeds, closed my door with pitch, and dropped me down into the river, which did not drown me. The river carried me to Akki, the water carrier. Akki, the water carrier, lifted me up in the kindness of his heart. Akki, the water carrier, raised me as his own son. Akki, the water carrier, made me his gardener. In my work as a gardener I was beloved by Istar. I became the King and for 45 years I held kingly sway." Similarity of this story to the biblical account of the infancy of Moses is at once evident. You recall that Moses was placed in an ark of bulrushes in the river to protect him from death, which had been commanded for all Hebrew male children by Pharaoh. His mother "took for him an ark of bulrushes and daubed it with slime and pitch and put the child therein and she laid it in the flags by the river's brink"³ and "the child grew and she brought him unto Pharaoh's daughter and he became her son and she called his name Moses."

The myth of Perseus recounts that the King of Argos, was told by an oracle that his daughter Danae would bear a son through

³ Holy Bible-Exodus, Chap. 2.

whose hand he would perish. In order to prevent this, his daughter was locked up by him in an iron chamber, which he caused to be carefully guarded, but Zeus penetrated through the roof, in the guise of a golden rain, and Danae became the mother of a boy. The King refuses to believe his daughter's statement that Zeus is the father and he encloses her with the child in a box which he casts into the sea. They are saved by a fisherman who keeps them as his relations. King Polydektes becomes enamoured of the beautiful mother and tries to get Perseus out of the way by sending him forth to fetch the head of the Gorgon Medusa. Perseus accomplishes this task and a number of heroic deeds beside. In throwing the discus at play, he accidentally kills his grandfather, as told by the oracle, and becomes the King.

Other myths of heroes might be recalled, involving the conflict with the father, the bringing up by lowly parents, miraculous deeds and eventual acquirement of the throne or power. In these hero myths are included the immaculate conceptions and the raising of the hero not only by lowly parents, but also by animals, for example, the she wolf, foster mother of Romulus and Remus.

"The normal relation of the hero toward his father and his mother regularly appearing impaired in all of these myths, as shown by the schedule, there is reason to assume that something in the nature of the hero must account for such a disturbance, and motives of this kind are not very difficult to discover. It is readily understood—and may be noted in the modern epigones of the heroic age—that for the hero who is exposed to envy, jealousy and calumny, to a much higher degree than all others, the descent from his parents often becomes the source of the greatest distress and embarrassment, and the old saying that 'a prophet is not without honor save in his own country, and in his father's house,' has no other meaning but this, that he, whose parents, brothers and sisters, or playmates, are known to us, is not so readily conceded to be a prophet. There seems to be a certain necessity for the prophet to deny his parents; . . . the prophetic hero is allowed, in favor of his mission, to abandon and repudiate even his tenderly beloved mother.'" You recall that Christ is said to have denied his mother in a gathering when he said in effect, "I know not this woman."

We may understand this denial of the parent and the rivalry of the father in a threat of killing him and of taking his place when we

consider again the attitude of the child, particularly the male child toward the father. As we said above, we believe most understanding of the development of myths can be brought by the consideration of the similar primitive mentality of the child or psychotic patients. We have mentioned above the rivalry of the father for the place of the child, the immaculate conception does away entirely with the earthly father and the conception by a Deity places the child the myth hero on a higher level. The child frequently feels neglected and dissatisfied with the attitude of his parents, particularly the father, misinterprets certain actions and develops a marked resistance against him and goes on to believe that such a person cannot be his real father and begins to imagine either that he himself, the child, is somebody else, a king or a prince, or that he may have been adopted from a royal family. The dissatisfaction with the parents and with things as they are, frequently leads children who cannot adjust themselves to life to consciously maintain such a belief, which becomes delusional and which thus satisfies their ego and elevates it to a plane which they think is more proper. We have already mentioned in the cases cited above the two girls who have denied their parents and considered that they were of higher birth. It is not infrequent that a woman will go on to develop the idea that she is a Madonna; that she is married to God and is to give birth to the Christ child. The same woman may maintain that she is also married to Christ indicating again the incest complex, and that she is to give birth through Christ to a second Christ child. We see in these beliefs not merely fantastic delusional states that have no foundation, but rather we look upon them as a means of obtaining in life by fancy what has been denied the person in real life. As we see it, the hero of the myths has had built around him legends which glorify him, take him out of the lowly herd and place him upon a level where the common person could look up to him and at the same time gratify through him his own ambition which had not been fulfilled. Such an attitude is shown at the present time in our own Christian religion when we speak of Christ being in us, of Christ being with us, of God being in us and our being a part of God.

Many of the myths of previous times, of course, have lost their force. They were at one time just as important in the life of the Greeks, Babylonians, Chaldeans and the Norges as the Christian

religion is to the present generation. Why they changed or died out is an interesting problem. Presumably they did not hold for later times the human interest that they had had previously, and, of course, with the Christians, the teaching of the Bible took their place. As Abraham⁴ says: "There comes a time with each race, when it unburdens itself of traditions, when in place of the old structures of phantasy a temperate manner of thinking appears. This development was furthered as well through advancing knowledge of the laws of nature as through the general situation of the race which satisfied its grandiose complex. The linguistic and mythical symbolism are plainly inadequate forms of expression for the modern spirit of the race; especially is this so of the English. Practical results make wish phantasies unnecessary. A race proceeds otherwise when it is widely separated from the realization of the national grandiose complex. The example of the Jews is typical. They have preserved, through long periods of time, wish phantasies from the childhood of the race. One thinks of the wish dream of the chosen people and of the promised land." Special attention is called to the thought that a temperate manner of thinking appears in place of the old structures of phantasy with a development of advancing knowledge of the laws of nature. One wonders whether at the present time this may be what is happening to the Christian religion with its reported decreased interest to society. One can speculate as to whether a more general knowledge of natural laws makes less the need of the Christian religion, which is recognized by many more today than in previous years to have had phantasy, and what may be called myth, incorporated in it. Controversy in the church itself indicates that there is such a recognition and the socialization of the church with its interest in the concrete human problems of every day life, its diversion and recreation facilities would suggest that the myth in the Christian religion is dying out as have the myths of the Greeks and Romans.

⁴ Dreams and Myths. Karl Abraham. Jour. Nervous and Mental Disease Pub. Co., 1913.

MALARIA TREATMENT OF SCHIZOPHRENIA

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The malaria treatment of general paralysis is followed in a large proportion of the cases by a marked improvement in the general nutrition of the patients. There seems to be a relationship of importance between the metabolic processes and the resulting clinical state. In fact it has been observed in the malaria treatment of general paralysis that if the fever is followed by a loss of weight then no improvement in the patient's mental condition takes place.¹ On the other hand cases of general paralysis showing a progressive and maintained gain in weight after malaria treatment are the ones in whom complete remissions most frequently occur. The factors operating in the production of these relationships are almost wholly unknown. It seems likely, however, that the nutritional improvement, observed in patients who have undergone therapy with febrifacient agents, might be of a different character than that associated with untreated patients.

We were desirous of finding out what the physical and mental reaction of patients with schizophrenia might be to inoculated malaria. We found but a single reference in literature to a similar investigation. Templeton,² who treated 20 cases of dementia præcox with malaria, reported that the results were of no lasting benefit; he claimed that for a period of about two months the majority of the patients showed "a brightening of intellectual interests, a desire to converse, to read newspapers and books." He described the changes as representing "a complete return to normal," adding that many "revealed a wonderful transformation of interest." At the end of two months, however, "there were few who had not materially lapsed." If some of his patients returned to a normal mental state, it is an observation of no small importance, independent of the duration of the "normal" period.

¹ Kirby and Bunker: Types of therapeutic response observed in the malaria treatment of general paralysis. *American Journal of Psychiatry*, vol. 6, No. 2, Oct., 1926. Also Bunker: The significance of gain in weight in the malaria treatment of general paralysis. *Archives of Neurology and Psychiatry*, Sept., 1926.

² Templeton, W. L.: The effect of Malarial Fever upon Dementia Præcox. *Journal of Mental Science*, Vol. 70, p. 92 (Jan.), 1924.

For our study we selected uncomplicated cases of schizophrenia. By "uncomplicated" we mean that they had no known organic diseases. We treated 13 female patients, ranging in age from 17 to 42 years; each patient was well beyond the period of puberty but under the menopause age. This selection was considered advisable, because we desired not to confuse the results with any changes that might accompany either the pubescent or the climacteric periods—changes of either a physical or of a mental nature. Furthermore, only patients with the clinical picture of hebephrenia were included in the investigation; the patients had been under observation for at least two years and the clinical diagnosis was assured. In order to minimize the probability of spontaneous improvement, patients were chosen who had not from the beginning of their psychosis exhibited any appreciable betterment. The clinical course in each case had either remained stationary for some time or had grown worse. Care had also to be taken as regards the environment, which it was thought should remain as nearly fixed as possible throughout the period of investigation. All patients received treatment on the same ward, under the same physician and nursing staff and with few changes in the census of patients. The object of making the surroundings essentially stationary was to reduce the probability of the patients reacting to new situations; it is known that many do react, sometimes to a striking degree, to environmental changes. They were accorded the same care after treatment had been ended that they had received before treatment had been started. With a fixed clinical picture in a fixed environment we felt that the results of malaria treatment might be reasonably well measured.

The technique of the malaria treatment was that ordinarily employed at the Psychiatric Institute.¹ The original donor was a young man suffering from a benign tertian malaria. He was free from lues and as far as could be determined had no other physical disease.

In Table I are recorded the age factor and the period of duration of the psychosis in each of the cases treated.

¹ Kirby, G. H.: The Treatment of General Paralysis. STATE HOSPITAL QUARTERLY, Aug., 1926.

TABLE I

Patient	Age	Duration of psychosis before treatment
1	23	2 years
2	27	5 "
3	21	4 "
4	28	6 "
5	18	2 "
6	39	3 "
7	42	9 "
8	40	7 "
9	17	2 "
10	29	6 "
11	31	4 "
12	38	6 "
13	25	3 "

The responses from the standpoint of the malarial fever itself, as well as from the standpoint of weight changes and clinical outcome, are recorded in Table II.

TABLE II. MALARIA TREATMENT OF SCHIZOPHRENIA

Patient	Number of paroxysms	Hours of fever above 102° F.	Weight status*	Mental status*
1	8	109**	Gain 15 lbs.	Unimproved
2	19	126	" 10 "	"
3	10	37**	" 26 "	"
4	13	179	" 8 "	"
5	13	116	" 14 "	"
6	13	110	" 2 "	"
7	22	158	" 17 "	"
8	12	141	" 59 "	"
9	14	179	" 3 "	"
10	18	130	Loss 8 "	"
11	12	167	" 9 "	Worse
12	8	88	Died during treatment	
13	9	86	Died during treatment	

* Six months after termination of treatment.

** These patients were highly resistive; their temperature often could not be secured.

By reference to Table II it will be observed that each patient was allowed to have at least the number of paroxysms that com-

monly is permitted in cases of general paralysis. Three of the patients (10, 2 and 7), had more than the usual number, namely, 18, 19 and 22 attacks respectively. The duration of the fever is reported as that of 102° F. or above. The average duration of high fever in the 13 cases on the whole parallels that generally recorded in the treatment of patients with general paralysis, and probably represents the optimum, as we now understand it. Two patients (1 and 3) were so highly resistive, that a complete account of their reaction to malaria could not be obtained.

Nine of the 11 patients living weighed more, six months after treatment was terminated than they had before treatment was instituted. The gain ranged from 2 to 59 pounds. In the large, the addition in weight compares favorably with that observed in cases of general paralysis treated with malaria, especially with those who show signs of improvement in the mental sphere. However, not one of the cases of schizophrenia, six months after the termination of treatment, showed any improvement in her general clinical condition. Ten of the 13 patients, six months beyond the period of treatment, were grouped as "unimproved"; one was worse, in the sense that a latent tuberculous process was rendered active; and two patients died during treatment.

Both of the patients who died during treatment developed acute brain symptoms (headache, vertigo, vomiting, delirium and finally coma) and died shortly thereafter. It appeared, from a study of blood smears, that the two cases were overwhelmed with malarial parasites.

During the period of malarial fever and of convalescence several of the patients exhibited interests that had not previously been seen in the psychoses. One woman, who had not for years inquired into situations at home, asked about the members of her family; she also engaged in a rational conversation with her visitors for the first time in years. Such renewal of interests, however, was fleeting and on the whole superficial. A second woman, who previously laughed boisterously nearly all the time, ceased such behavior for a time during treatment. At the most it can be said that whatever signs of improvement were seen accompanied the phase of nursing care; and it is not at all certain that malaria itself was responsible in any direct manner, because we know that schizophrenic patients often show improved responses when provided with special care

and attention such as was provided during the course of the fever. Others may exhibit unfavorable responses so far as conduct is concerned as did two of our cases, who became more highly resistive during treatment.

As a result of our experiences in this selected group of schizophrenic patients, we are not encouraged to recommend the malarial form of treatment under the conditions that we have outlined. On the contrary, we feel that there are definite contraindications, these being, first, the mortality rate, and, second, the tendency to arousing latent tuberculous processes which are known to be prevalent in this class of patients. We should not be deterred, however, in the application of the malaria treatment of schizophrenia under circumstances other than those reported in this investigation. When we know more of the mode of operation of malaria in other forms of mental diseases, it may be possible to induce favorable responses in the cases now classed with the "functional" psychoses.

EPILEPTICS IN INSTITUTIONS IN THE UNITED STATES*

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The need of separate state institutions for the care and treatment of epileptics was not recognized by any state prior to 1890. The first state institution in this country for the separate care of epileptics was the Ohio Hospital for Epileptics, opened in 1893. New York was the second state to establish such an institution, Craig Colony having been opened in 1894. Massachusetts and New Jersey opened their institutions for epileptics in 1898. The most recent of the institutions now in operation is the Iowa State Hospital and Colony for Epileptics, which was authorized in 1914 and opened September 3, 1917. At the time the census was taken, there were only nine state institutions exclusively for epileptics, located in the following states: Indiana, Iowa, Kansas, Massachusetts, Michigan, New Jersey, New York, Ohio and Texas. In North Carolina the institution for epileptics is not a separate one, but is a department of the State hospital for mental diseases at Raleigh.

The state institutions for epileptics formerly maintained in Connecticut, Illinois and Virginia have been changed. The 1917 legislature of Connecticut enacted a law consolidating the Connecticut Colony for Epileptics, located at Mansfield, and the Connecticut Training School for the Feeble-minded, at Lakeville, into one institution for feeble-minded and epileptics, called the Mansfield State Training School and Hospital. The Dixon State Hospital, Illinois, which was authorized by the 1913 legislature as a state colony for epileptics, was opened May 1, 1918. In 1919 its status was changed by law so that feeble-minded persons might also be admitted. Since 1920 it has received from time to time a few patients with mental disease from the state hospitals. The Virginia State Epileptic Colony, which was chartered by the 1906 legislature of that state and placed under the control and management of the Western State Hospital, became an independent state institution in 1910, and

* Summary of census study of institutions for epileptics taken by Federal Census Bureau with the assistance of the authors, January 1, 1923.

received its first patients May 16, 1911. In 1912 the legislature authorized the Virginia Colony for Feeble-minded Women at this institution, which was opened in 1914 as a separate department. By the terms of the Code of 1919, these two institutions were combined, and designated the State Colony for Epileptics and Feeble-minded.

The census of epileptics in institutions taken by the Federal Census Bureau on January 1, 1923, the results of which have recently been published, was the first special institutional census of epileptics ever taken by such bureau. In the general census of 1890 data were incidentally obtained relative to epileptics among the insane, feeble-minded, and other patients in State institutions, but as the epileptics as a group were not stressed in the general enumeration, it is probable that the number reported was much less than the number of epileptics in the population at that time. The report of the census of that year showed 4,440 epileptics among the insane, 3,165 among the feeble-minded, and 992 among inmates of benevolent institutions.

In the special census of institutions taken January 1, 1904, 11,652 epileptics were enumerated in institutions for the insane, and 3,015 in the institutions for the feeble-minded. In the census of institutions taken January 1, 1910, the epileptics among the insane were not separately enumerated. The number of epileptics reported in institutions for the feeble-minded in that year was 2,444. The reduction of epileptics in these institutions from 1904 to 1910 was thought to be due to the greater special provisions for the care of epileptics in colonies or separate institutions. The 1923 census shows 12,936 epileptics in institutions for feeble-minded and epileptics.

In the hospitals for mental disease on January 1, 1923, there were reported 9,155 epileptic patients with psychosis and 861 without psychosis. In the special census of almshouses taken on the same date, 1,066 epileptics were reported. Altogether a total of 24,018 epileptics in institutions is shown by the census of 1923.

No adequate data exist relative to the number of epileptics in the population at large. It is generally believed that such number is several times greater than the number of epileptics under treatment in institutions.

The patients in special institutions for epileptics for whom epi-

leptic schedules were received in the several states with ratios based on estimated population are shown by the following table:

TABLE 1. PATIENTS IN INSTITUTIONS FOR EPILEPTICS,
JANUARY 1, 1923, BY STATES
(Ratios based upon population estimated as of July 1, 1922)

State	Number	100,00 of total population	State	Number	100,000 of total population
United States	8,777	8.0	Mississippi	4	0.2
Arkansas	4	0.2	Nebraska	93	7.0
California	15	0.4	New Jersey	769	23.2
Illinois	245	3.7	New York	1,562	14.6
Indiana	416	13.9	North Carolina	193	7.3
Iowa	424	17.3	Ohio	1,729	28.7
Kansas	533	29.8	Pennsylvania	178	2.0
Maryland	12	0.8	Texas	605	12.4
Massachusetts	1,140	28.7	West Virginia	188	12.3
Michigan	664	17.1	Wisconsin	1	*
			Wyoming	2	1.0

* Less than one-tenth of 1 per 100,000.

Table 2 shows the number of resident patients in each state institution specially provided for epileptics.

TABLE 2. PATIENTS IN STATE INSTITUTIONS FOR EPILEPTICS,
JANUARY 1, 1923

Institution	Males	Females	Total
Indiana Village for Epileptics	406	..	406
Iowa—State Hospital and Colony for Epileptics	201	199	400
Kansas—State Hospital for Epileptics	321	226	547
Massachusetts—Monson State Hospital	497	549	1,046
Michigan Farm Colony for Epileptics.....	347	323	670
New Jersey State Village for Epileptics.....	382	375	757
New York—Craig Colony	780	752	1,532
Ohio Hospital for Epileptics	827	821	1,648
Texas—State Epileptic Colony	292	258	550
Total	4,053	3,503	7,556

The data in Tables 1 and 2 show that very unequal provision for epileptics has been made in the various states. Several of the northern and western states and most of the southern states have not segregated their epileptics, but are caring for them in institutions for feeble-minded or insane or in almshouses.

RACE AND SEX

Of the 8,777 patients in institutions for epileptics for whom schedules were received, 8,601, or 98 per cent, were white; 173, or 2 per cent, were negro; and 3 were Indians. The rate of resident white patients per 100,000 of white population was 9.1. The corresponding rate for negroes was 1.7. The figures do not indicate that the rate of epilepsy is lower among negroes but that a smaller proportion of negro epileptics are cared for in institutions.

Of the 8,777 resident patients, 4,741, or 54.0 per cent, were male, and 4,036, or 46.0 per cent, female. There was considerable variation in the sex distribution of patients in the several states. No female patients were reported in Arkansas, Indiana, Mississippi, Wisconsin and Wyoming. In Pennsylvania the number of female patients was almost double that of male patients. It is not known that epilepsy is more prevalent in one sex than in the other. The variations are probably due to unequal provision for the two sexes in some of the states.

Of the 1,421 first admissions to institutions for epileptics for whom schedules were received, 1,384, or 97.4 per cent were white; 34, or 2.4 per cent, were negro, and 3 or 0.2 per cent, were Indians. The general average rate of white first admissions per 100,000 population of the same race for the country as a whole was 1.5. The rate for negroes was 0.3. Of the total first admissions, 900, or 63.3 per cent, were male, and 521, or 36.7 per cent, were female. The excess of males among resident patients and among first admissions is probably due to the fact that the female lives a more sheltered life than the male and, consequently, finds less difficulty in meeting the demands of family or community life.

NATIVITY AND PARENTAGE

Of the 8,601 white patients in institutions for epileptics on January 1, 1923, 7,803, or 90.7 per cent, were native born; 736, or 8.6 per cent, foreign-born, and the nativity of 62, or 0.7 per cent, was unknown. Of the native born, 4,225, or 54.1 per cent, were of native parentage; 1,494, or 19.1 per cent, of foreign parentage; 664, or 8.5 per cent, of mixed parentage, and 1,420, or 18.2 per cent, of unknown parentage. The rate of resident patients per 100,000 of general population of same nativity was 9.6 for native whites and

5.4 for foreign-born whites. The low rate for the foreign born is probably due to the fact that immigrants found to have epilepsy are excluded from this country. Of the foreign-born whites, 474, or 64.4 per cent, were found in New York, Massachusetts and Ohio.

Of the 1,384 white first admissions to institutions for epileptics during 1922, 1,253, or 90.5 per cent, were native; 110, or 7.9 per cent, foreign born, and the nativity of 21, or 1.5 per cent, was unknown. Of the native born, 751, or 59.9 per cent, were of native parentage; 258, or 20.6 per cent, of foreign-born parentage; 99, or 7.9 per cent, of mixed parentage, and 145, or 11.6 per cent, of unknown parentage.

The rate of first admissions per 100,000 of general population of same nativity was 1.5 for native whites and 0.8 for foreign-born whites.

AGE DISTRIBUTION

The age distribution of the resident patients in institutions for epileptics is shown in the accompanying table. It will be noted that 2.9 per cent were under 10 years of age; 56.4 per cent between the ages of 15 and 40 years and 4.2 per cent 65 years of age and over.

TABLE 3. PATIENTS IN INSTITUTIONS FOR EPILEPTICS, JANUARY 1, 1923, BY AGE AND SEX, FOR THE UNITED STATES

Age	Number			Per cent distribution		
	Males	Females	Total	Males	Females	Total
All ages	4,741	4,036	8,777	100.0	100.0	100.0
Under 5 years	10	12	22	0.2	0.3	0.3
5 to 9 years	139	89	228	2.9	2.2	2.6
10 to 14 years.....	343	293	636	7.2	7.3	7.2
15 to 19 years.....	564	404	968	11.9	10.0	11.0
20 to 24 years.....	596	497	1,093	12.6	12.3	12.5
25 to 29 years.....	589	451	1,040	12.4	11.2	11.8
30 to 34 years.....	482	477	959	10.2	11.8	10.9
35 to 39 years.....	475	420	895	10.0	10.4	10.2
40 to 44 years.....	387	394	781	8.2	9.8	8.9
45 to 49 years.....	345	342	687	7.3	8.5	7.8
50 to 54 years.....	262	237	499	5.5	5.9	5.7
55 to 59 years.....	200	149	349	4.2	3.7	4.0
60 to 64 years.....	146	110	256	3.1	2.7	2.9
65 to 69 years.....	98	75	173	2.1	1.9	2.0
70 years and over.....	91	65	156	1.9	1.6	1.8
Age unknown	14	21	35	0.3	0.5	0.4

The first admissions naturally constitute a much younger group than the resident patients, 66.3 per cent being under 30 years of age at the time of admission. The number and per cent distribution of the first admissions by quinquennial age groups is shown in the accompanying table:

TABLE 4. FIRST ADMISSIONS TO INSTITUTIONS FOR EPILEPTICS DURING 1922, BY AGE AND SEX, FOR THE UNITED STATES

Age	Number			Per cent distribution		
	Males	Females	Total	Males	Females	Total
All ages	900	521	1,421	100.0	100.0	100.0
Under 5 years	10	7	17	1.1	1.3	1.2
5 to 9 years.....	61	43	104	6.8	8.3	7.3
10 to 14 years.....	126	77	203	14.0	14.8	14.3
15 to 19 years.....	162	100	262	18.0	19.2	18.4
20 to 24 years.....	151	62	213	16.8	11.9	15.0
25 to 29 years.....	97	47	144	10.8	9.0	10.1
30 to 34 years.....	73	44	117	8.1	8.4	8.2
35 to 39 years.....	56	48	104	6.2	9.2	7.3
40 to 44 years.....	43	25	68	4.8	4.8	4.8
45 to 49 years.....	34	22	56	3.8	4.2	3.9
50 to 54 years.....	28	18	46	3.1	3.5	3.2
55 to 59 years.....	19	6	25	2.1	1.2	1.8
60 to 64 years.....	16	8	24	1.8	1.5	1.7
65 to 69 years.....	6	10	16	0.7	1.9	1.1
70 years and over.....	11	2	13	1.2	0.4	0.9
Age unknown	7	2	9	0.8	0.4	0.6

MARITAL CONDITION

Patients in institutions for epileptics are for the most part unmarried. This may be accounted for in part by the fact that many enter the institutions before reaching marriageable age and also in part by the fact that public opinion and the nature of the disorder itself are deterrents to marriage. The marriage of epileptics is forbidden by the laws of some states.

Of the 8,777 resident patients, 7,188, or 81.9 per cent, were single; 1,077, or 12.3 per cent, were married; 320, or 3.6 per cent, were widowed, and 135, or 1.5 per cent, were divorced. Of the 1,421 first admissions, 1,127, or 79.3 per cent, were single; 212, or 14.9 per cent, were married; 40, or 2.8 per cent, were widowed, and 29, or 2.0 per cent, were divorced.

ENVIRONMENT OF FIRST ADMISSIONS

Of the 1,421 first admissions, 909, or 64.0 per cent, were from urban environment; 463, or 32.6 per cent, were from rural environment and 49, or 3.4 per cent, were unascertained as to environment or previous residence. The general rate of first admissions per 100,000 of population in urban districts was 1.7 and in rural districts 0.9. The rate for the males was 2.1 in urban districts and 1.1 in rural districts. The rate for females was 1.2 in urban districts and 0.6 in rural districts. The difference in these rates does not necessarily imply that epilepsy is more prevalent in urban than in rural districts as it is probable that a larger proportion of epileptics in urban districts reach institutions.

ALCOHOLIC HABITS OF FIRST ADMISSIONS

The first admissions to institutions for epileptics were classified according to their use of alcohol prior to admission as "abstinent," "temperate" and "intemperate." The term "abstinent" applied to persons who used no alcoholic liquor whatever. "Temperate" denoted persons who used some liquor, but not in sufficient quantities to be classed as intemperate. "Intemperate" use was inferred from (1) repeated intoxication; (2) physical, mental, or moral deterioration, or any disease due to alcohol, and (3) unsocial acts due to alcohol.

Of the 1,421 first admissions to institutions for epileptics, 1,072, or 75.4 per cent, were abstinent; 119, or 8.4 per cent, were temperate; 46, or 3.2 per cent, were intemperate; and the alcoholic habits of 184, or 12.9 per cent, were unascertained.

From these data it is apparent that the use of alcohol was not a factor of great importance in bringing epileptic patients to the institutions.

NUMBER OF TIMES ADMITTED

The resident population of the institutions for epileptics consists largely of chronic patients who remain in the institution from the time of admission until death. A large percentage of the first admissions, however, leave the institution within less than one year of the time of admission.

With respect to number of times admitted, the resident patients were distributed as shown by Table 5.

TABLE 5. PATIENTS IN INSTITUTIONS FOR EPILEPTICS, JANUARY 1, 1923, BY NUMBER OF TIMES ADMITTED TO SUCH INSTITUTIONS

Times admitted	Number			Per cent distribution		
	Males	Females	Total	Males	Females	Total
Total	4,741	4,036	8,777	100.0	100.0	100.0
1 time	3,785	3,329	7,114	79.8	82.5	81.1
2 times	732	575	1,307	15.5	14.2	14.9
3 times	102	53	155	2.2	1.3	1.8
4 times	24	14	38	0.5	0.3	0.4
5 times and over.....	21	4	25	0.4	0.1	0.3
Unknown	77	61	138	1.6	1.5	1.6

LENGTH OF TIME IN INSTITUTIONS

Of the 8,777 patients, only 1,237, or 14.1 per cent, had been in the institutions for less than one year while 4,507, or 51.3 per cent, had been under treatment five years or more. Four hundred and forty, or 5.0 per cent, had been in the institutions 20 years or over. The average institutional life of the females is longer than that of the males.

DISCHARGES

The general rate of discharges from the institutions for epileptics during the year per 100 admissions was 45.4. The rate for the males was 51.3 and for the females 34.2. The rates of the discharges classified by condition on discharge are shown by Table 6.

TABLE 6. RATE OF DISCHARGES PER 100 ADMISSIONS BY SEX AND CONDITION OF DISCHARGE

	Males	Females	Total
Recovered	1.0	1.7	1.2
Improved	22.8	16.8	20.7
Unimproved	25.7	13.7	21.6
Not epileptic	0.2	0.2	0.2
Unknown	1.7	1.9	1.8
Total.....	51.3	34.2	45.4

The low rate of recoveries confirms the general opinion concerning the serious nature of this disorder.

DEATHS

There were 581 deaths among patients in institutions for epileptics in 1922. Of these, 355 were males and 226 females. The death rate per 1,000 under treatment for males was 62.6, for females 50.6 and for both sexes combined 57.3.

The median age group of the deaths of each sex was 35 to 39 years. This comparatively low age at death supports the general belief that epilepsy greatly shortens life.

About one-half of the deaths were due to epilepsy, the death rate from this disease being 28.7 per 1,000 patients under treatment. Tuberculosis of the lungs was the next most prominent cause with a rate of 4.8. Other prominent causes were bronchopneumonia with a rate of 3.5 and nephritis with a rate of 2.1. The general rate for suicide was 0.8, but in Nebraska the rate was 9.8 and in North Carolina 4.6.

TABLE 7. DEATH RATES IN INSTITUTIONS FOR EPILEPTICS FROM CERTAIN SPECIFIED CAUSES

	Rates per 1,000 under treatment		
	Males	Females	Total
Tuberculosis of lungs	4.1	5.8	4.8
Cancer	0.7	1.3	1.0
Epilepsy	32.3	24.2	28.7
Arteriosclerosis	0.5	...	0.3
Bronchopneumonia	3.3	3.6	3.5
Lobar pneumonia	1.9	1.8	1.9
Diarrhea and enteritis	1.9	1.3	1.7
Nephritis (all forms)	2.1	2.0	2.1
Suicide	0.7	0.9	0.8
All other causes	15.0	9.6	12.6
Total	62.6	50.6	57.3

CLASSIFICATION OF EPILEPTICS

The census inquiry did not attempt to make a detailed classification of epileptics with respect to type of disease but separated them into two principal groups, namely, symptomatic and idiopathic. The term "symptomatic" was defined as including only those cases of epilepsy in which it is decided that the seizures are symptoms of a definite disease, while "idiopathic" included those cases in which the underlying cause of the spasmophilia is unknown. Table 8 gives the frequency of the two types of epilepsy in the several movement groups:

TABLE 8. MOVEMENT OF PATIENTS IN INSTITUTIONS FOR EPILEPTICS, BY SEX AND TYPE OF EPILEPSY*

	Types of Epilepsy					
	Symptomatic			Idiopathic		
	M	F	T	M	F	T
First admissions, 1922	144	80	224	694	413	1,107
Readmissions, 1922	29	16	45	181	45	226
Discharges, 1922	81	27	108	468	163	631
Deaths, 1922	92	38	130	258	185	443
Resident patients, January 1, 1923	719	513	1,232	3,886	3,401	7,287

EPILEPTIC EX-SERVICE MEN

On account of the great interest in the institutional care of ex-service men the census schedule for epileptics included the question: "Was patient in the military or naval service of the United States during the World War?" The question was answered in the affirmative for 107 patients in residence in these institutions on January 1, 1923, and for 90 first admissions and 81 readmissions, 123 discharges and 3 deaths during the year 1922. Twenty-four of the ex-service epileptics were in institutions in New York State and 19 in institutions in Massachusetts. One hundred five ex-service patients were white and 2 were negroes.

IS EPILEPSY INCREASING?

From data at present available, we are unable to answer positively the question: Is epilepsy increasing? It appears probable, however, from the incomplete data at hand that epilepsy is becoming relatively less of a problem in the United States. The census of epileptics taken by the National Committee for Mental Hygiene, January 1, 1920, showed that, exclusive of the epileptics included among the patients with mental disease, there were on the date of the census 14,937 epileptics under treatment in institutions of the United States. The census did not include almshouses but covered both public and private institutions for epileptics and feeble-minded. The census of the Federal Census Bureau on January 1, 1923, enumerated 12,936 epileptics in the same classes of institutions, a decrease of 2,001 compared with the previous census. The census of 1904 showed 11,652 epileptics in hospitals for mental disease, as compared with 10,016 shown by the census of 1923.

* Unclassified and non-epileptic patients are not included.

The patients with epileptic psychoses in the New York Civil State hospitals have declined in recent years. The record of epileptic first admissions and of epileptic patients on the books of the hospital for each year since 1917 is shown in the accompanying table:

TABLE 9. PATIENTS WITH EPILEPTIC PSYCHOSES, NEW YORK CIVIL STATE HOSPITALS, 1917-1926

Year	Patients on books at end of fiscal year		First admissions during fiscal year	
	Number	Per cent of total patients	Number	Per cent of total admissions
1917	1,223	3.4	142	2.1
1918	1,214	3.3	146	2.1
1919	1,156	3.1	178	2.6
1920	1,117	2.9	149	2.3
1921	1,169	2.9	198	2.9
1922	1,203	2.9	178	2.5
1923	1,146	2.8	153	2.2
1924	1,118	2.6	116	1.7
1925	1,123	2.6	162	2.2
1926	1,113	2.5	133	1.8

As the epileptic patients with psychoses probably constitute a nearly constant proportion of the total number of epileptics, it seems probable that a decline in the number of epileptics in the community has also taken place. Such decline in epilepsy may be associated with the better care of infants, or the lessened consumption of alcohol, or may be due to unknown factors. In view of the serious nature of the disease, it is highly gratifying to observe its decline even though it still constitutes a serious unsolved health problem.

CONGENITAL WORD BLINDNESS A CASE STUDY*

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Recently there was brought to the child guidance clinic at Nyack, a girl of twelve years, with the complaint that she failed to get along in school. The case was referred by the school principal who felt convinced that the girl was a mental defective.

A. B. was born in New England, June 23, 1914. The family history was negative for nervous and mental diseases. The parents were obviously of good intelligence and the two older children, one in high school two and a half years, and the other in junior high school at eleven years, appeared superior. The patient herself presented a history typical of that usually found in mental defectives. She could not make progress in school and was wholly unable to read. She had been advanced in spite of this until, at twelve years, she was in the fifth grade. Here, as in the preceding grades, she did excellent work in arithmetic, but nothing in reading and spelling. Geography, history and language, being so dependent on reading, were likewise poor. In personality the child was rather excitable and very sensitive. She preferred to play with younger and smaller children. The physical examination was negative. She was a well developed girl, and very attractive. There was no history of injury or infectious illnesses.

At the time the psychometric tests were attempted, the examiner was wholly unfamiliar with the patient's history. A few moments' conversation with the child about her school work created the impression that she was a mental defective, but very high grade. Consequently, the examiner, in giving the Stanford-Binet test, was much surprised to find her totally unable to read—after several years in school. As the examination proceeded and it became apparent that her intelligence was of a good level, alternates were substituted for tests directly dependent on the ability to read, such as the reading test in Year X and the dissected sentences in Year XII. This procedure gave a Terman mental age of 11-9 and an I. Q. of 93. This mental age was not considered a true one, however, as this reading disability interfered indirectly with success on many other tests for which no substitution could be made. Her

* Letchworth Village Publication No.

practical judgment and interpretive ability were superior and her auditory imagery was excellent. She had poor mental control, however, and practically no visual imagery. There was a decided weakness in words and tests dependent on education. The child was quick and nervous in her reactions and suffered from marked emotional blockings which unquestionably affected the test score.

In the light of the Terman results with their suggestion of a special disability the personal history was reviewed. The complete failure to grasp reading and spelling, contrasted with the good work in arithmetic was significant. Conversation with the parents elicited the information that the child had always shown a quick grasp and good memory for anything explained to her orally. Her vision was normal, yet the school authorities suggested that she seemed to need glasses. Added to all this was the girl's own remarkable insight. She faced the situation frankly, explained and analyzed her difficulties in a clear and logical fashion which would be rather startling in a mental defective.

A provisional diagnosis of congenital word-blindness (visual aphasia) was made and this was explained to the parents. They were very co-operative and willingly agreed to bring the child to Letchworth Village for a more complete psychological examination.

The laboratory findings were interesting. The patient, realizing that she had been considered feeble-minded and comprehending all that this implied, was extremely difficult to test. She was very nervous, unstable and acted as if she had been under a strain. She was, however, alert, quick, interested, and sincerely anxious to make a good score. Five tests from the Pintner-Patterson scale were given and the performance median was 14 years, 9 months. The Porteus maze tests yielded a score of 15 years, her only error in this whole series being one careless, impulsive move. On the Healy Pictorial Completion Test II, a difficult test for the true defective, she made a total of 68.5 points. The median score for children her age is 58 points, and the normal for average adults is 65 points. Her performance in this test, then, was very superior for a girl of twelve years. Her comprehension and judgment were excellent, she was quick in both mental and physical reactions, and presented altogether a picture of a superior child. Then a reading test was attempted and she failed to do even first grade reading.

The formal examination for visual aphasia as used at Letchworth Village was given. The schedule for this examination is as follows:

VISUAL APHASIA

Lesion located	Angular gyrus of left parietal lobe	
Understands language	Spoken	Yes
	Written	No
Expresses language	Spoken	Yes
	Written	No
Dictation	Repeats	Yes
	Writes	Partly, but then cannot read it
Copies written language	Yes	
Incidental conditions	Homonymous hemianopsia when the lesion is in the optic radiation; mind-blindness if the lesion is bi-lateral	

A few samples show how the patient followed this schedule.

I. Understands language.

A. Spoken—She obeyed all kinds of commands.

B. Written—From the following list of words,—*on, at, form, from, an, one, head, hen, own, them, then, they, thing, saw, was, you, yes*,—she read only three, *at, you, yes*. She also failed to read such sentences as: *Give the book to me*, and *Who am I?*

II. Expresses language.

A. Spoken—She answered all questions very intelligently.

B. Written—The following list of words was given her. The first column contains the words themselves, the second column her spelling of them.

<i>book</i>	<i>book</i>
<i>hand</i>	<i>hand</i>
<i>paper</i>	<i>paper</i>
<i>just</i>	<i>gast</i>
<i>few</i>	<i>fads</i>
<i>eat</i>	<i>eat</i>
<i>school</i>	<i>skold</i>
<i>father</i>	<i>jrnr</i>

<i>business</i>	<i>basns</i>
<i>home</i>	<i>hom</i>
<i>house</i>	<i>hisn</i>

She was able to read from the list she had written only *hand* and *eat*.

III. Dictation.

A. Spoken—Repeated sentences of fifteen or more syllables correctly.

B. Written—The following four sentences were dictated. After each is given the patient's writing of it.

1. *I can see*.....*I can see.*
2. *I see a dog*....*.....*I see a dag.*
3. *The dog runs after the cat*....*The dag ras anft the cat.*
4. *Father comes home at night*....*Frinr cas hin at nite.*

When asked to read the sentences that she had written she could read only the first two. She was, however, able to copy correctly anything placed before her. Her handwriting is legible and of fair quality.

She is not numeral blind and can do difficult problems in arithmetic provided that they are expressed in numerals or that someone reads the words to her. She can also read and write the letters of the alphabet.

The laboratory findings thus confirmed the theory of congenital word-blindness. The case was then presented at a meeting of the staff of Letchworth Village who concurred in this diagnosis. The principal of the school was notified and an attempt is being made to secure special teaching for the girl. The recommendations in her case are:

1. That the child, who is now right-handed, be taught to use her left hand as a means of developing the corresponding center on the other side of the brain. This method is advocated by both Dr. Orton¹ of Iowa City and Dr. McCready² of Pittsburg.
2. That special instruction in reading and spelling be given. Painstaking drilling in the fundamentals, always with the realization that the patient can read letters and that she learns best through auditory channels, should produce good results.
3. That the child be encouraged in every possible way. She has suffered so long and so keenly from her disability that she is much

disturbed emotionally. Wise and sympathetic handling should do much to improve her stability.

The prognosis in this case appears unusually good. The child has a decided advantage in her good environment and fine intelligence level. Added to this is the fact that she understands her own condition and is gamely determined to overcome it.

It is regrettable that this case is so recent that nothing has as yet been accomplished in the teaching project. It is suggestive, of course, of the number of other children, backward in school, and presenting somewhat the picture of a mental defective, who may be retarded on this account. It is probable that word-blindness occurs frequently among the feeble-minded, but in such cases a diagnosis, although interesting, is not so vital as in the instance of a bright child. Even if this disability occurs in but one of every two thousand normal children, as is estimated, it seems reasonable that cases should appear from time to time at our clinics.

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¹ "Word-blindness" in School Children. Samuel T. Orton, Archives of Neurology and Psychiatry. November, 1925.

² The Aphasias of Childhood: Congenital Word-blindness and Word-deafness as Causes of Mental Retardation and Deviation. E. Bosworth McCready. The Southern Medical Journal, September, 1925.

THE INVESTIGATION OF THE OEDIPUS AND HOMOSEXUAL COMPLEXES IN SCHIZOPHRENIA

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During recent years a large number of papers have appeared in the psychiatric literature dealing with the question of the relation of the Oedipus or Jocasta complexes in the causation of the functional psychoses and neuroses. Practically all of these studies have demonstrated a very definite relation between a mother (or father) attachment, along with a homosexual or narcissistic fixation, and the development of dementia præcox. In view of the large proportion of dementia præcox cases seen in state hospital practice, it would seem desirable that special attention be paid to these factors in securing anamneses and in carrying out mental examinations. The ultimate value of such investigations cannot be fully prognosticated at present, but they will undoubtedly bring to light valuable facts on the origin of certain psychoses, thereby giving the clinician a greatly clarified idea of the therapeutic problem before him. But of far greater value will be the data thereby made available for use in formulating mental hygiene measures in the realm of preventive therapeutics.

With a proper understanding of how the pathological attachment of a son for his mother or a daughter for her father, develops, it is not outside the realm of possibility that, through proper training throughout childhood and adolescence, these pathological attachments to a parent of the opposite sex may be prevented. Certainly, these so-called fixations can be prevented from developing to such an extent that they become the definite cause of a psychosis. The various methods now in vogue for the dissemination of mental hygiene information, are undoubtedly helping in great measure to prevent psychoses from developing in later years in patients now under care in the various child guidance and other clinics. This is also true of the general population who read the various pamphlets now available. But the problem of pathological parent attachments has received relatively little emphasis in the mental hygiene literature available to the general public. If it can be demonstrated that family attachments are relatively often allowed to progress to

the point of becoming pathological, then it is apparent that educational measures should be inaugurated, which would have as their object the prevention of these abnormal attachments. It is greatly to be desired that the public be instructed as to what constitutes a normal child-parent relationship, and be given proper warnings and instructions on how to prevent these relationships from becoming abnormal or pathological.

One of the most recent of the papers referred to above is that by Hutchings, Cheney and Wright,¹ on "Psychogenic Precipitating Causes of Schizophrenia." They state that "the etiology of schizophrenia is as much a controversial topic today as it has been at any time since the disorder was first described by Kræpelin." . . . "The writers believe that schizophrenia is a constitutional disorder and that without a constitutional difficulty of adaptation the reactions which we designate as schizophrenia would not occur." . . . "These events related to the earliest years of life when the psychosexual correlation is in the formative stage and the individual more susceptible than later to influences which tend to direct the development into fruitless or eccentric modes of expression. These influences are to a large extent environmental and due to the example and influence of parents and other members of the immediate family. They are summed up by the psychoanalytic conception of the Oedipus complex. Upon the success with which one is able to free himself from the infantile type of attachment to the parent, or the parent imago, depends his psychical poise and ability to resist disturbing influences." . . .

"As we see it, the psychosis schizophrenia develops as an eccentric or malignant reaction of the personality to a threatened or actual appearance in consciousness of a repressed and long forgotten infantile incestuous attachment to the parent of the opposite sex, a mechanism which is recognized as the Oedipus complex. Such inflations of previously repressed strivings may also result in homosexual wishes becoming manifest to consciousness."

These writers then describe in detail two cases of schizophrenia. One is a female of 35, in whom a definite unconscious father attachment is demonstrated as the basis of her psychosis, and who *in her phantasy*, gets rid of her husband, by imagining he dies and who then elopes with a Dr. T., who is very definitely serving as a father surrogate in this regard, thereby rationalizing her unconscious

incestuous ideas. The other a male of 31, in whom a definite mother fixation as well as firmly-fixed homosexuality were both demonstrated as the basis of his psychosis. His psychosis was the result of the conflict between his unconscious, but instinctively recognized homosexual cravings, and his previously adopted standards of manliness, which made the homosexual cravings impossible of acceptance. He heard voices saying, "There goes the c. s. That is the guy"—showing how his own unconscious homosexual desires come to the surface disguised as libelous stories about himself.

Hinsie² states in his article on "Family Situations as Factors in the Development of Dementia Præcox"—"it is an observation *worthy of detailed investigation*, that very often the first expression of a developing psychosis has reference to a break in the relations of the patient with his parents or some member of the family circle, and that the subsequent psychotic material represents in a large measure an elaboration of the initial expression." . . . "The break between the patient and some member of the family, is tremendously intensified with the onset of puberty. We refer to the break from a loved one, such as a son from his mother or a daughter from her father." After these preliminary remarks he reviews at length the histories of two cases of dementia præcox in men, in both of whom a definite mother fixation was plainly demonstrated, the conflicts arising therefrom being the etiological agents in the development of their psychoses. In one of these cases this mother fixation was plainly illustrated in the words of the mother herself, as follows: "He (the patient) was so much devoted to me; he loved me; we were just wrapped up in each other; I was all him and he was all me."

In studying the dementia præcox cases on the wards of Hudson River State Hospital, it has been possible to demonstrate repeatedly, after proper questioning, mechanisms similar in all respects, or with slight deviations, to those shown by Hutchings, Cheney, Wright, Hinsie, Boltz and others. It is, of course, a great help to the clinician, in studying a given case, if the anamnesis gives some inkling of the patients' relationships to the parents, especially toward the parent of the opposite sex. But in by far the greater proportion of anamneses, nothing is asked the informant regarding this factor and it is but natural that he or she does not volunteer information on that score. If, in securing anamneses, relatives

were routinely questioned as to whether the patient was especially attached to any member of his family, we would secure much valuable objective information regarding the patient. However, in a very large proportion of dementia præcox cases, one can secure by proper questioning, sufficiently definite subjective information (through psychotic trends, answers to indirect or direct questions, dreams, etc.) to postulate very safely a definite Oedipus complex as well as an homosexual complex, conscious or unconscious, as the case may be. There are, however, large numbers of schizophrenic cases, who because of evasiveness, catatonia, etc., do not yield such information subjectively. In such cases complete information in the anamnesis would be especially valuable for a definite understanding of the patient and his individual problems, as well as in deciding the prognosis.

A few examples will be given to show the manner in which definite mother attachments as well as homosexuality have operated as factors in the development of dementia præcox. Very short summaries will be given of material relevant only to this particular subject since it is not the purpose of this paper to include lengthy or detailed case histories.*

Case 1. W. W. In answer to questions about his feelings toward his parents, he said: "I kissed my mother three times on the mouth and gave her \$1,500 when I left the old country in 1885. I miss her very much; *I wouldn't take a young woman for her.*" There is undoubtedly a pathological mother attachment here.

Case 2. U. L. This patient's trend is sufficient to demonstrate a marked Oedipus situation with definite incest wishes constantly present during his psychosis. "Of course if you sleep with your wife you can bring children into the world; we're not permitted by law to have children by our mother; we must respect our mother; *we dare not commit adultery with our mother*; I'm the Kaiser; my mother is a beauty; why I look like my mother." Again later (grandmother incest): "I'm the million dollar baby; there's hundreds of my babies buried alive out there under the grass; see them; the patients should be put out and my babies put in here; and I could sleep with my grandmother in ward 45; I'm the father of all them babies." Still later (changed back to mother rather than grandmother incest): "I'm the Kaiser; *I got couple hundred children by my mother*; my mother is in the basement; I got too much money; I got about 15 or 20 times \$500,000 or \$1,000,000." His phantastical assumption of his father's role is only too

* In a later paper more detailed accounts of some of these cases will appear.

evident in his grandiose delusions (Kaiser, millionaire, etc.) and his regression has reached very evidently the narcissistic level.

Case 3. W. B. The phantasies in this case only mildly indicate the real pathological nature of his mother attachment. *He is subject to hallucinations constantly but the voice heard most often is that of his mother* saying: "You are a good boy; go to church Sunday morning and pray." He hears her repeat this over and over. With the history one can see that his ideas are prominently on the narcissistic level.

Case 4. D. C. This man projects his own incestuous cravings onto a preacher in his phantasies. "A man operated on my mother, yes a man with a long silk coat, a preacher; he performed the operation by means of electricity and in this way he has made her pregnant and has made her want men; because she has my sister's ankles; I saw the man who operated on her when I was three years old; the man wore a silk robe and was some kind of a preacher." There is evidence of a sister incest fancy here also.

Case 5. M. H. This man does not in his trend show very open evidence of a mother attachment or of incestuous desires. He said: "My mother—she's always good to me, always lovin' me; good girl." However, when questioned in detail regarding his feelings towards her, he said: "I have often wished it would be possible for me to have intercourse with her." This brings to our attention the desirability of asking questions in this regard, as we may bring out very valuable facts.

It would be possible to give more examples of this nature, but these will be sufficient to illustrate the point I wish to make, namely, that it is possible to demonstrate an Oedipus complex in practically every case of dementia præcox that is at all productive, and who does not evade questioning on this particular subject. Naturally in those cases who are extremely sensitive as to this relation, and who have not as yet accepted consciously their incestuous cravings, we will not be able to demonstrate such a complex from the patient's own statements as he will evade questions on the topic. It is in just such cases, that a complete anamnesis which includes information on this phase of the patient's family relationships, will be of the most value. In many such cases we will be able to demonstrate definite Oedipus situations from our objective data. This is a factor of no little importance since it is impossible in state hospital practice to carry out a long psychoanalysis on each individual patient, for the purpose of bringing to the surface unconscious incestuous cravings.

Boltz⁶ has made one of the most valuable of the recent contributions on the present subject. He states: "It is this constitutionally

unsociable tendency, I feel, that predisposes schizothymics, in a measure, to strong family attachments which may become incestuous; these incestuous tendencies, in the case of males, are unwittingly fostered by the mother. In at least 90 per cent of male schizophrenias, the patient is his mother's favorite child. If the mother has strong narcissistic tendencies, or does not receive satisfactory emotional gratification from her husband, the young son easily becomes the recipient of her feelings. In some of my cases, this mother-son situation, even to the layman, assumes at times the appearance of a courtship." . . .

"Mothers of that type . . . will sometimes bathe or allow him to share her bed (I know of at least three cases where such bad hygiene accounted for strong incestuous tendencies in the patient) even after he reached puberty. *It is here that much can be done in the prophylaxis of schizophrenia.*" . . . "My personal feeling, however, is that the Oedipus complex, at least in degree, is not such a universal phenomenon as some members of the psychoanalytic school would have us believe. That it exists in the history of schizophrenics can without effort be recognized by any careful, unprejudiced observer." . . .

"In schizophrenics, the homosexual outlet is sooner or later blocked, like the incestuous, because of a hypertrophic conscience in the manner already described, i. e., by repression and a voluntary reinforcement of the "introversion reflex"; they then become latent homosexuals who, when from inner or outer causes the repression weakens, may develop a schizophrenia with defense mechanisms against homosexual gratification in reality (stiff affect, delusions of persecution, ideas that strangers call them "c. s.," "fairy," "woman," "fag," "fruit," etc.). Inasmuch as the schizophrenic has finally blocked off all form of object love (both homosexual and heterosexual) in reality, the sexual impulse seeks gratification in phantasy (dreams, hallucinations, wish-fulfilling delusions, etc.) in accordance with the principle: "Pleasure without blame"; and in a regression to lower forms of sexual outlet; oral and anal eroticism on a narcissistic or autoerotic level of libidinal investment."

Following the perusal of Boltz' article, in which a large number of case histories are given in detail, and which show comprehensively the mechanisms he describes above, I devoted some time to

a study of the mechanisms presented in a large group of dementia præcox cases. I found, with surprising regularity, and in a very large proportion of those patients who were sufficiently accessible for a satisfactory examination, mechanisms practically identical in all respects (with occasional minor variations) to those so well described and exemplified in his paper. A few examples, again in summarized form, will be given to show this conformity in findings. In many of these the oral and anal components of their homosexuality are very apparent.

Case 6. W. W. In this case the incestuous desires have become so well accepted consciously as to have produced the delusional belief that actual incest took place. He has also accepted quite well his oral eroticism and desire for fellatio, yet not sufficiently to prevent the existence of the delusion of "hair in my throat." He says: "I was worth \$4,000,000 at one time; I've been married six or seven times; I remember being *married to my mother* at one time; I was in the habit of having *intercourse with my mother often* but she said I was too short; I didn't do it very often to her; only about once a night; I had two small sisters by my mother; I was the father of one myself." He coughs often—asked why? "Someone puts hair way back in my throat. I suppose it is some fellow I used to go with; he is a fellow of bad actions; he tried to (perform fellatio) on me; he acted just like he just came out of a girl and wanted to get back to her (passionate); he tried to do it often to me; he succeeded once in a while." At another time: "Priests usually are not kind to girls; I was a priest (father surrogate) myself once; a priest could do that (fellatio) to me anytime he wanted to; I think it would be better to keep away from priests."

Case 7. H. J. This case illustrates the common delusion in these cases of someone trying to perform fellatio on him. "I feel a lump in my throat; wood; it's a stick of wood" (phallic symbol).

Case 8. T. M. A case showing a typical word salad with intermingled homosexual persecutions, various symbolisms, and a mild admission of a mother attachment. "Change auto hoses; Oh! what station was that; Yes, Oh! Ah! dear president; Yeah lemme see; the voices get a little rough at times; I'm called: Oh! s. o. b. or like that: Oh! bastard; and p—k they mention; and sometimes we know ourselves (probable Biblical symbolism for auto-eroticism); and a couple of pillars could be got up in the day time (symbolisms for erection); Oh! yeah I'm pretty sure the mother is the nicer of my parents; Oh! we hear her voice in a way at times I'm pretty sure; they call it recreation."

Case 9. F. P. Another case with various symbolisms, who is persecuted

by homosexuals, yet gets rid of his wife in his phantasy also—being unable to adjust to either heterosexuality or homosexuality. He says: "I'm a framed man; men and women frame me; they give you 'scum needles'; they jerk their p—ks and shoot it in your mouth; the 'code groups' are the ones that do it; you are framed as a c. s. or a murderer; they chopped off the German girl's head the other day; she is the woman that was framed as my wife 10 years ago."

Case 10. G. P. This man has an extreme paranoid reaction. In his trend he shows homosexual persecutions as well as some tendency toward delusions of grandeur. "They said M. G., former governor, talks through the table there; but I don't believe it; he is deceased; yes, I heard his voice; he said I was an unbeliever; 'they' call me s. o. b. and bastard and all such names except Jesus Christ."

Case 11. P. Mc G. In this case, the patient believes he was persecuted by men in high office, Mayor ——— of New York and others, who "read his thoughts." He was subjected to various other (homosexual) persecutions as follows: "These people have had me under electricity since Dec. 15, 1919; sure they know everything that is going on; although they don't control my thoughts, they can read my mind; it was men! men! when I was in a saloon some men were trying to give me the 'third degree' (homosexual assault): they worked secretly on me without me knowing it; they can impersonate women sexually; these men can have connection just like women; they take the part of a woman and work up my passion; their nakedness bare; and they make me masturbate myself through my own thoughts through the vibration machine; of course I like my mother best; she was always so kind to me." He will undoubtedly in an unguarded moment sometime divulge the full depth of his mother attachment, but his "chip-on-the-shoulder" attitude would not allow further questioning on so delicate a subject. He slept with his mother until the age of five years.

Case 12. J. M. He has the idea that a sort of knotted handkerchief works up and down in his throat (fellatio phantasy). He finally admitted that men "insulted" him: "He was bigger than I was, he turned me over and insulted me; 'cornholed' me (pederasty); of course other men did it to me; I suppose he had some power over me to conquer a man's body and make him lay his body down like that; my rectum is always itching." He had been committed because of an attempt at rape on a girl. Questioned about this, he said: "That is what a girl is for; to be 'cornholed' (intercourse); the doctor told my cousin she needed to get married so I told her I would give her what she needed and I tried to 'cornhole' her; that's what all the girls need now." The Oedipus situation is well shown here: "My mother told me before she died: 'If you can't get a girl as good as me, then I'll kill you,' and I couldn't find none as good as her so I didn't pick none at all."

From a consideration of the work of the writers above quoted, as well as the corroborative evidence that is shown in the cases cited herein, it is believed that it will be self-evident that the presence of a pathological mother attachment can be demonstrated in the greater proportion of cases of dementia præcox. This may be entirely unconscious, and can be brought to light only by analysis, or it may be almost wholly conscious and on the surface, as in some of the cases cited, though not accepted by the individual—whence arises the psychosis. It may also be shown to exist by the observations of relatives of the patient. It is also evident that an homosexual, and in its absence a narcissistic, complex, either conscious or unconscious, can also be shown to exist in by far the greater proportion of schizophrenics. Since these complexes have been demonstrated as existent in such a large proportion of the accessible cases of dementia præcox, one is fairly safe in assuming that such complexes do exist in practically all cases of dementia præcox. This assumption can be made, despite the fact that, because of an incomplete anamnesis or because of the inaccessibility and resistance of the patient, such complexes are not plainly shown to exist in individual cases.

In order to assist in extending our knowledge of the complexes existent in our patients the writer has collected a series of questions for use in securing anamneses as well as in mental examinations. It is believed that questions along this line will undoubtedly show the presence of these pathological complexes in cases when they would not be suspected, in the absence of data regarding them. It is not assumed that this group of questions is perfect or complete. They will, however, serve as a starting point and new questions will continually suggest themselves to the individual investigator. It is of course preferable to question both relatives and the patient in an indirect manner. In this way we will secure an exact description, in their own words, of the patient's feelings toward his mother. However, in some cases, where indirect questioning does not bring to light any information that would show the presence of a definite Oedipus complex, direct questioning may do so. One must always be especially careful in questioning either patients or relatives along these lines, as in many cases their sensitiveness to abnormalities of this kind in themselves or their relatives, would

cause a marked resistance toward the examiner. This resistance would prevent the examiner from securing the really accurate information he desired.

QUESTIONS FOR ANAMNESIS

Has he (she) shown any special attachment to any member of the family? If so, toward whom? Describe attachment fully. How did it affect his daily life? Is he (she) especially attached to either parent? If so, what is his attitude toward the other parent? Did he (she) sleep with the mother (father) as a child? If so, to what age? To which parent did he (she) display the most affection? How was this affection shown? Was he (she) sociable? Did he (she) mingle with the opposite sex naturally? Or did he (she) prefer only members of the same sex? Have you noticed any peculiarities in his conduct toward any members of his own sex? Has he been known to have indulged in homosexual practices?

QUESTIONS FOR MENTAL EXAMINATION

Whom did you like best in your family? Who always treated you the best? Which of your parents did you prefer? Was your mother always kind to you? Was your father always kind to you? Which parent is more affectionate toward you? How was this affection shown? Which parent are you most affectionate toward? How did you show this affection? Whom did you prefer of your brothers (sisters)? Whom do you prefer of your aunts, uncles, etc.? Do you dislike either parent? Why? Whom do you like better—your father or your mother? Tell me why? Do you keep company with girls? Prefer the company of men? Ever have any strange experiences with men? Do men ever call you bad names? Do you hear men's voices calling you bad names?

CONCLUSIONS

1. In by far the greatest proportion of cases of schizophrenia the existence of an Oedipus complex can be demonstrated either objectively or subjectively, or by both methods.
2. In a relatively large number of those cases in which an Oedipus complex can be demonstrated, a coexistent homosexual complex can also be demonstrated.
3. Further investigations of these factors, with a view toward

the institution of prophylactic measures for schizophrenia are indicated. The formulation of proper prophylactic measures can be greatly enhanced by the aid of large numbers of cases studied in the state hospitals.

4. It would be desirable to incorporate in each anamnesis complete information about the patient's family life, to show the presence or absence of a pathological parent attachment.

5. It would likewise be desirable to incorporate in the mental examination findings regarding the presence or absence of conscious or unconscious, incestuous or homosexual cravings.

6. A group of questions for the securing of such information is suggested.

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CIRCULATORY RATINGS IN MENTAL DEFECTIVES

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It was with the idea of finding a constant physical component in the make-up of the emotionally unstable mental defective that this study was undertaken. This idea was suggested by a report of Trentzsch¹ on the use of a circulatory rating test on adolescents in which there appeared to be a definite correlation between neurotic reactions and a low circulatory rating. The writer suspected that where an individual is so constituted or conditioned that seemingly small irritations trip an episode fraught with an emotional explosion that it might be possible to catch a cardio-vascular reaction even when there is no apparent outward expression of an instability by the use of the Circulatory Rating Test described by Schneider.²

During the summer of 1926 through the interest of Miss Rachel K. Haight, a Toronto University Medical Student, a series of female mental defectives, between the ages of 10 and 40, and of the moron level, were studied by the Circulatory Rating Test. In all, 250 patients were subjected to the test.

The test was carried on under standard conditions in the examining room. Other conditions, such as the time of day, elapsed time after meals, slight physical indispositions, etc., were not standard; patients were taken from their daily routine to the examining room as required.

Of the total 250 patients, 230 gave a rating of 9 or more while only 20 obtained a rating below 9. Table I shows the actual numbers and proportions of adaptive and unstable patients in the total group, the group with a rating of 9 or more, and the group with a rating of less than 9. The proportion of adapted and unstable patients in each group is not sufficiently different to receive any clinical evaluation.

TABLE I. DISTRIBUTION OF INSTABILITY IN RELATION TO RATING

Circulatory rating	Total		Adapted patients		Unstable patients	
	Number	Per cent	Number	Per cent	Number	Per cent
Below 9	20	8.0	14	7.3	6	10.2
9 or over	230	92.0	177	92.7	53	89.8
Total	250	100.0	191	100.0	59	100.0

In Table II there shows up an interesting factor in the age of the patients in the group with a rating below 9. The fact that the failure to show an efficient cardio-vascular response increases rapidly with the age supports the clinical observation that mental defectives become old quite prematurely.

TABLE II. DISTRIBUTION OF AGES IN RELATION TO RATING

Circulatory rating	Total		Age Groups					
			10—15 Years		16—20 Years		21 Years and over	
	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent
Below 9	20	8.0	5	5.2	15	14.9
9 or over	230	92.0	52	100	92	94.8	86	85.1
Total	250	100.0	52	100.0	97	100.0	101	100.0

In order to determine what effect the different environmental factors outside of the control of the examining room might have on the circulatory rating, eight patients were examined at hourly intervals throughout the day with the following results.

	8 a.m.	9 a.m.	10 a.m.	11 a.m.	1 p.m.	2 p.m.	3 p.m.	4 p.m.
Case I	4	9	10	10	6	9	13	13
Case II	4	8	13	15	10	10	12	13
Case III	12	15	18	17	12	14	17	16
Case IV	10	10	11	10	10	10	13	15
Case V	14	16	16	16	12	14	16	14
Case VI	12	10	6	4	10	13	6	10
Case VII	8	10	10	8	12	10	10	14
Case VIII	6	10	8	10	2	8	10	10

Undoubtedly there are factors in the daily life of our patients which have some bearing on the circulatory rating they obtain. Just what such factors are it is not possible to specifically state. Fatigue, time elapsed after meals, familiarity with the test itself, apparently all enter into the final rating.

CONCLUSIONS

1. Female mental defectives of the moron level generally speaking, have a satisfactory circulatory rating.
2. The older the patient the more liable is the cardio-vascular efficiency, as measured by this test, to fail.

3. On account of so many other factors entering into the rating, this test is of little or no value as an objective finding in patients with an emotionally instability.

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NEW MENTAL HYGIENE LEGISLATION IN NEW YORK

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The outstanding feature of the legislative session which ended March 25, 1927, so far as the mental hygiene movement is concerned, is the bill carrying out the constitutional provision for the establishment of a department of mental hygiene. This bill passed both houses of the Legislature, was signed by the Governor, and became Chapter 426 of the Laws of 1927.

The task which confronted the Legislative Bill Drafting Commission in preparing this bill for the legislative committees on reorganization was no small one. In brief it was necessary to combine in one statute to be known as the Mental Hygiene Law, the Insanity Law, the Mental Deficiency Law and the laws relating to Craig Colony, at the same time making necessary changes to provide for important differences in administering the department and transferring the statutes regarding Matteawan and Danemora State Hospitals from the Insanity Law to the Prison Law, and the Institution for Defective Delinquents at Napanoch from the Mental Deficiency Law to the Prison Law.

The Insanity Law was adopted as the foundation for the revision. Advantage was taken of the opportunity to rearrange the sequence of the statutes and group the several sections under appropriate headings. An example of this is in new Section 19 of the Mental Hygiene Law which relates to qualified examiners. This section is a combination of Sections 14 and 81 of the Insanity Law and Section 25 of the Mental Deficiency Law. The guiding principle in the preparation of the Mental Hygiene Law was to revise the old statutes only where necessary to conform to the re-organization of the State Government and the new organization of the Department, and to eliminate conflicting provisions existing in the several statutes involved. In general the system of institution management and control as developed and practiced under the State Hospital Commission is retained and extended to apply to the State schools and the State Colony for Epileptics which are incorporated into the Department with the State hospitals for the insane. The system of financial management is unchanged as is the system of visits and inspections. The Boards of Managers or

Trustees are retained with change of name to Board of Visitors, and with practically the same functions as Boards of Managers of State hospitals under the Insanity Law, excepting in the matter of appointing and removing a superintendent. Under the Insanity Law the Boards had a vetoing power whereas under the Mental Hygiene Law, the final decision rests with the Commissioner, but he is required to afford the Board of Visitors not less than 10 days in which to file a statement of their views and recommendations. The duties of the Boards of Managers or Trustees of the State Schools and Craig Colony, were modified so far as necessary to conform to the requirements of the Insanity Law applying to Boards of Managers of State hospitals.

The Mental Hygiene Law makes important changes in the administration of the Department itself. In place of the Commission of three members composed of a physician, a lawyer and a layman, the Mental Hygiene Law provides for a commissioner, who is required to be a physician, and three assistant commissioners, all of whom are to be physicians chosen after competitive examination; one to be in charge of the division of mental diseases; another, of the division of mental defect and epilepsy; and the third, of the division of prevention. As developed by the bipartisan Reorganization Commission under the chairmanship of Honorable Charles E. Hughes, the basic idea in the constitutional amendment reorganizing the State Government is to place full power and responsibility in the hands of the chief executive of the State and this idea is carried through the several departments whose heads are appointed by the Governor and who in turn have full authority and discretion in appointing and removing subordinates.

The most serious objections to the law in its final form as enacted relate to the provision giving the Commissioner a two-year term only, the same as the term for Governor, instead of appointment during good behavior as heretofore; and to the provision changing the name of the Board of Managers to the Board of Visitors. This latter is especially obnoxious to the members of the Boards who feel that their duties and responsibilities as prescribed in the revised Mental Hygiene Law are more accurately described by the word "Managers" than by the word "Visitors." The Boards of some of the institutions transferred to the Department had somewhat broader powers than the Managers of State hospitals, particu-

larly with reference to financial management and control, and in these instances the Boards have, of course, been relieved of such authority and responsibility in the reorganization.

The above is only a brief outline of the changes made necessary under the reorganization of the State government. It should be noted, however, that the constitutional amendment did not require a single commissioner, and the Legislature at any time may restore the commission of three or more members.

The task of amalgamating the several institutions into one homogeneous department will not be an easy one and will require the careful, earnest attention and study of those responsible for the department. Many questions, some of major importance, have already arisen and upon their wise and adequate answer depends to a considerable degree the success or failure of the scheme of reorganization.

Probably the most appealing feature of the new Department is that making provision for a special division of prevention to be in the immediate charge of an assistant commissioner. This large and almost virgin field offers great possibilities especially for the benefit of coming generations. The way in which these problems are worked out will be watched with great interest not only in New York State but throughout the country, as there is now general realization of the fact that to continue to herd great numbers of sick people in institutions, while it is necessary under present conditions, is not making any contribution toward relieving the burdens of future generations in caring for those suffering from mental disorder. Preliminary surveys of the situation lead one irresistibly to the conclusion that the most promising point of attack is the period of childhood and adolescence. The Department hopes that it may in time educate the public to understand that in all matters of mental hygiene, the department institutions and agencies should be regarded and used as first-aid stations, and not, as is too often now the case, only resorted to when other means of treatment have failed and valuable time has been lost.

Legislation affecting the salary and wage schedule of the State hospital service, which has been urged by the Commission and the State Hospital Employees' Association for some time, has been enacted by the Legislature and approved by the Governor. This legislation establishes a principle that is unique insofar as it

applied to public employees in this State. The law as enacted made no changes, excepting in two minor instances, in the existing schedule of positions and minimum and maximum rates of compensation. It, however, provides as follows: Employees are allowed the following increases for continuous time service above the maximum rate, viz: \$3.00 per month at the end of three years, five years, ten years and fifteen years, making a total of \$12.00 per month increase at the end of 15 years' continuous service and the bill further provides that continuous service heretofore performed shall be counted. An appropriation of \$350,000 was made to carry out the provisions of this law.

The act makes it possible to afford substantial recognition to employees as a reward for faithful, continuous performance of duty, and to offer them an inducement to remain in the service, and at the same time avoid the necessity of raising the minimum rates for new employees entering the service, which it is believed in the majority of instances, are now fairly adequate as compared with employment conditions outside the institutions.

The law as enacted applies only to the State hospitals for the insane as the wage schedules of the other institutions recently transferred to the department are not embodied in the statutes. The department hopes that another year the wage schedules of this group of institutions may be standardized and if experience with the new time service law above mentioned, proves satisfactory, similar provisions may be applied to the other institutions in the Department.

Several appropriation bills have been approved. The appropriations for maintenance are, so far as can now be foreseen, adequate for the needs of the coming year. The appropriations for repairs, improvements, new construction, etc., from maintenance and from bond issue moneys, have been made in accordance with the program heretofore adopted.

The Department was also granted funds for additional land at Craig Colony, at the new Wassaic State School, at the new Rockland State Hospital, and an appropriation for a site for another new State hospital, probably to serve the metropolitan district.

There are a number of laws of collateral interest to the department as well as others of special interest to a single institution or

section of the State. Two of these, one involving a considerable portion of the grounds of the Buffalo State Hospital and the other a similar situation at the Manhattan State Hospital, Ward's Island, New York City, suggest that the time may be near at hand when these large institutions located in rapidly growing cities will have to be abandoned in whole or in part, and new institutions located in rural sections some distance from the city. Institutions for the treatment of mental disorders of necessity require considerable ground, and such area in a large city may become so valuable that its continued use for hospital purposes is economically unsound, and has a tendency to retard normal development of the city in the vicinity of the institution.

The legislative session was a quiet one as measured by previous standards and there were comparatively few bills introduced which the Department felt it must oppose. No particularly obnoxious bills affecting the Department have been passed by the Legislature.

BOOK REVIEWS

The Significance of the Physical Constitution in Mental Disease.

By F. I. WERTHEIMER and FLORENCE E. HESKETH, with a Preface by Lewellys F. Barker. The Williams & Wilkins Company, Baltimore, 1926.

This book is the product of a study carried out by the authors on 65 male patients from Phipps Clinic, and the Spring Grove State Hospital of Maryland. The authors introduce their results with an interesting review of the theories and conclusions of previous workers in anthropology and anthropometric studies in psychiatry. A description of Kretschmer's types is given in some detail and a so-called pyknic type added. The problem for investigation is stated by the authors as "The task of an investigation of morphological and psychopathological correlations therefore resolves itself into the following questions: Can recurrent typical body forms be determined by inductive anthropometric methods; can body types, differentiated by observation and description, be correlated with exact anthropometric data; are there any correlations between anthropometric and psychopathological findings?" Nineteen of the patients were considered to show predominantly affective (manic-depressive) reaction types, 25 predominantly schizophrenic types, 11 organic reaction types and 10 psychopathic personalities and psychoneuroses. Observation of the individual patient, which appears to have been quite careful in detail, resulted in a classification, according to the types of Kretschmer, with also mixed forms and a small proportion whose type was described as "unclear." Fifty-three anthropological measurements were taken of each patient and 30 indices were calculated in each case. It was concluded from this that "no absolute measurements or indices were indicated as selectively significant in assigning classes in respect to body types with exception to the Pignet Index." The Pignet Index is criticized as unsatisfactory, in that it includes the weight which may be quite variable from time to time and the authors cite cases to show that on the basis of this index a patient at one time might be classified as having an athletic constitution and at another time an asthenic constitution. The authors then present a discussion of an index formulated by them which obviates the undesirable factor of weight and involves measurements of the transverse chest diameter, sagittal chest diameter, trunk height and leg length. The use of this index shows that the "values of the index are in definite relation to the body types obtained from observation.

"The clear asthenic, athletic and pyknic observation types of Kretschmer

can be exactly differentiated by the use of the index; the athletic type stands between the asthenic and pyknic types, according to the index, but definitely nearer the asthenic.

"The practical advantage of the index is that it can easily be put to clinical use.

"The influence of race and occupation on these typical body forms seems negligible.

"Among the patients with high index values the schizophrenic psychoses predominate over the manic-depressive psychoses; among the patients with low index values (pyknic and pyknoid) the manic-depressive psychoses predominate. The exact numerical relationship cannot yet be established on account of the influence of age and growth.

"Cases in the affective group specified as showing schizophrenic reactions show morphological characteristics which are more frequent in the schizophrenic group."

The authors offer a discussion of prepsychotic personalities in relation to the body types of their patients. They prefer the use of the word "syntropic" instead of "syntonic," and "idiotropic" in place of "schizoid." They show that the average index of their patients who had syntropic personalities is distinctively different from the index shown by the idiotropic group. "The pyknic habitus predominates in the syntropic group, the asthenic-athletic types in the idiotropic group."

The authors point out that "although we must assume that structure and function have a definite relationship also in the sphere of psychobiological integration, both the extent and the nature of this relationship are as yet unknown and a field for investigation."

The book is an interesting and thoughtful contribution to the problem of the relation between the physical constitution and mental disease, and is well worth the perusal and careful consideration of psychiatrists.

CHENEY.

Personal Hygiene Applied. By JESSE FEIRING WILLIAMS, A. B., M. D. Second Edition, Revised; 414 Pages, Illustrated. W. B. Saunders Company, Philadelphia.

At the outset the author states that the aim of the book is to improve the quality of human life. The aim seeks its goal by means of hygiene but not by a mere recitation of the rules of health. To improve human living one must not only observe such rules but also bring them in contact with that ever-flowing source of human action where ideals, ambitions, attitudes, prejudices, hopes and aspirations are borne. The author further states that "to find the scientific rule for health is not more important than to touch the mainspring of action that will give life and meaning to the rule discovered."

In reading the book one is impressed by the skill of the author in carrying out the purpose outlined. The book abounds in inspiration as well as information. The author defines health as the quality of life that renders the individual fit to live most and to serve best. Health so defined becomes, from the author's point of view, a challenge to the leaders of all organizations, and to all persons everywhere, to interpret health in terms of service. He adds that social effort to improve health, to eradicate disease, to enrich the processes of life should be directed constantly toward the purpose of life itself as that may be understood.

In the opening chapter, the author points out the enormous losses suffered by society on account of the ravages of preventable diseases and gives an outline of the factors entering into the health problem. These, he states, to be hereditary influences, environment, and individual ideals and behavior. He holds that the personal factor is important apart from the influences of heredity and environment, and points out the fact that many individuals with good heredity and satisfactory environment have serious health problems. Such individuals he places in three classes, as follows: First, those who believe that the body will care for itself in some way without giving it any special care or intelligent attention; second, those who follow the promptings of instinct and live on the plane of the lower animals; third, those who fail to realize the high points that could be reached by living at their best.

The author's discussion of intelligence and ideals as related to health is based on McDougall's three levels of conduct, namely, the instinctive level, the instinctive level modified by rewards or punishments, and the level in which conduct is controlled, modified and directed by an ideal. Naturally the last named is the one to be sought in all health work. The author emphasizes the ideal of social responsibility and states that this ideal will lead the way to new accomplishments, sometimes by new roads through unbroken ground and sometimes by connecting old pathways. For both young and old such an ideal will quicken and give meaning to life.

In the succeeding chapters the author discusses the scientific basis of modern hygiene, taking up the various organic systems separately and giving with respect to each the results of the latest researches. In the chapter on the hygiene of the nervous system, several pages are devoted to mental hygiene; but in this comparatively new field, the author is apparently dependent on the views of others.

The chapters on the prevention of specific diseases and the hygiene of the mouth, eye and ear are excellent.

The work as a whole is a most comprehensive summary of the best ideas of the present day relative to personal hygiene and community health work. It is also an inspiration to better living.

POLLOCK.

Religion and Morbid Mental States. By H. I. SCHOU, M. D. Translated from the Danish, by W. Worster, M. A. The Century Company, New York, London.

This book claims to be the first ever written that instructs the clergy how to deal with the mentally deranged among their parishioners. It has been published in Denmark, Sweden and England, where it is widely used as a text in theological seminaries. The author is a lecturer at Copenhagen University as well as head of a hospital for mental and nervous diseases at Dianalund.

The purpose of the book is to throw light upon the relation between religious soul-life and morbid mental states, by going through the principal disease groups in brief, and showing, for each group, the manner in which mental troubles affect the religious life of the individual. The author attempts to distinguish between morbid and healthy religious life as a guide to the clergy on this most important point. The spiritual treatment of mental cases is dealt with at length, with the endeavor to show where such treatment may be considered advisable and where it is likely to do more harm than good. It is an earnest effort of a physician to study the religious psychology of the insane.

The topics discussed are: Religion and Melancholia, Religion and Manic-Depressive Insanity, Religion and Incurable Forms of Insanity, Religion as a Cause of Insanity, and Spiritual Treatment of the Insane, Religion and Nervousness, Religion and Mental Degeneration.

Of late years, the study of morbid mental conditions has been left to medical specialists, and is no longer common property, as it was in earlier times. The medical materialism of the last century also tended to make the mind or soul a secondary matter, and resisted all the claims of psychotherapy. The time has come to recognize that all, particularly the clergy, have a duty toward the mentally disturbed.

The author uses an old classification of mental disorders and does not seem aware of the newer conceptions in this field. We summarize his views: Morbid mental states arise from disordered functions of the physiological organism; the mentally disturbed are sick persons. Pathological conditions may be regarded as mental diseases, nervous diseases and mental disturbances or abnormality. The commonest and most typical of the ordinary mental diseases is melancholia, with its preliminary stage—mental depression. This is a disease, a brain affection. It is very often accompanied by religious doubts and trouble of mind, particularly self-reproach. The clergyman, as well as physician, by knowing that this self-reproach is not a sign of

wickedness, but a symptom of disease, may help the patient by aiding him to understand this fact.

Mania, the author states, is just the reverse of melancholia, its opposite in every respect. Patients of the manic type are glad and boisterous and associations of ideas take place with abnormal liveliness. For this reason it is harder to know that such person is ill. Like melancholia, mania is a curable disease. It is marked by an exalted mood, and the religious ideas which dominate the manic are pleasurable and lofty in tone. But the religious crises in a state of mania should not be taken by the clergyman for more than they are worth. Even flashes of genius are surmised to be of manic character. The clergy need wisdom and care to deal properly with such cases. In cases of mental suffering, people turn first of all to those whom they have been accustomed to regard as their spiritual guides, and it is necessary for them to be informed in relation to these diseases.

The most common form of incurable insanity from the author's viewpoint is the idea of persecution; the patient becomes taciturn and bitter, unapproachable and full of hatred to all about him. Reformatory or religious paranoia is one of the most troublesome to society and peculiarly engages the attention of the clergy. In practically every form of insanity we may find fixed ideas of a religious character. It is in relation to the insane that psychology finds its hardest therapeutic task. Religion is a rare cause of insanity, but a diseased person may be affected by special excitement. Religion is rather the safeguard against insanity, and should be so understood in the hands of the wise clergyman. Mental trouble is a merciless exposure of ourselves. All that is inherent in the personality comes to the surface, and things before unsuspected become clear as day. Religion as a primitive tendency may be suppressed in every-day life, but religious life becomes powerful and violent in psychosis because it is an instinctive craving. Treatment should be both physical and spiritual. Spiritual comfort can be administered like medicine, a teaspoonful three times a day.

Nervous illness renders people sensitive and occasions a mental change in them. Rest is necessary. A firm religious conviction is of great advantage and the best of medicine for persons with such affliction. Freud's theory of the treatment of hysteria, the author believes to have been somewhat exaggerated and overdone, but nevertheless has been largely justified; for it has shown the great importance of mental conflicts as a cause of disease, and the fundamental importance of such disharmony in producing mental disturbances. The clergyman in common with the physician has the task of aiding mankind to attain peace and harmony, health and happiness. Suggestive force is a very powerful agent and a remarkable healing factor which can produce the most astonishing effects on the sick.

The author's final plea is for a church that will not put everybody in a spiritual uniform but will deal with each individual according to his character and capacity, and for a clergy who will understand different human types including the mentally deranged.

GEORGE S. PAINTER.

Readings in Abnormal Psychology and Mental Hygiene. Edited by W. S. TAYLOR, Professor of Psychology in Smith College, with an Introduction by Joseph Jastrow, Professor of Psychology in the University of Wisconsin. D. Appleton and Company, New York, London, 1926.

This work is a source book which brings together in the words of our leading psychologists the subject of abnormal psychology as it is understood today. It particularly emphasizes "functional" phenomena, processes which may be regarded as the core of the subject, and which are of special interest to the student of general psychology, medicine, sociology or education. There are more than 200 selections, the best-considered expression of experts in the field. These readings, covering the various types of nervous and mental abnormality with the cause and treatment of each, make up a sympathetic and comprehensive text. The selections in the volume have been chosen for their usefulness as a text-book for students, and are confined to those writings which favor an understanding of the phenomena rather than historical or controversial interest. Only brief mention is made of feeble-mindedness, as occupying a neighboring field; and the problems of delinquency and crime, mediumship, mysticism, "the racial unconscious," and the like, are not brought in, because for these subjects the general principles of abnormal psychology would seem to be the first consideration.

Psychologists and others have long felt the need of a book which would cover the field of abnormal psychology completely and in a scientific manner. The subject is so extensive that no one author could hope to write expertly upon all the various phases of it. Dr. Taylor has selected from the writings of leading specialists in each branch of the science their most valuable and significant comments, and has carefully arranged and edited these to make a systematic and organic treatment of the subject as a whole. The selections discuss all important kinds of mental abnormality, covering nomenclature, classification, diagnosis and causes of mental disease, and explain the principles of mental hygiene. They also cover "suggestion," "complexes," "inhibitions," "the subconscious mind," and other such subjects of general interest regarding the exact nature of which there is much

current misunderstanding. The readings are of particular value in that they present the subject largely from the standpoint of mental hygiene, emphasizing throughout methods of prevention, diagnosis, and treatment.

GEORGE S. PAINTER.

The Conquest of Disease. By THURMAN B. RICE, A. M., M. D., 363 Pages, Illustrated. The MacMillan Company, New York City

The triumph of science over communicable disease constitutes the greatest achievement of the past half century. The story of the work of Pasteur, Koch, Lister and their followers has frequently been told but the story each year has renewed interest because of the new discoveries for the safeguarding of human life that are continually being made. "The Conquest of Disease" tells the story in a popular way and shows the recent gains that have been made in overcoming the unseen but deadly enemies of human life.

The purposes of the book as set forth by the author are, first, to give the most recent scientific information concerning transmissible diseases to the end that these diseases may be controlled or perhaps ultimately eradicated; second, to make the study interesting if possible to the general reader and to such persons and students as may need to study the subject; third, to emphasize the great advances that have already been made through scientific methods by comparing the past with the present. The book is divided into three parts, the first dealing with the causes and transmission of communicable diseases, the second part with the separate diseases and their prevention, and the third part with the means by which transmissible diseases are controlled. In part 2, the communicable diseases are grouped with respect to their mode of transmission as follows: (a) diseases spread by intestinal discharges, (b) saliva-borne diseases, (c) insect-born diseases, (d) contact diseases.

In his discussion of the individual diseases, the author describes the causes, symptoms, methods of prevention, and social effect. He also shows the progress that has thus far been made with respect to each disease and gives suggestions for the improvement of methods of control.

The book is a highly useful one for health workers and should have a wide circulation among people in general. The typographical work and illustrations are unusually good.

POLLOCK.

Human Physiology. By PERCY G. STILES, Assistant Professor of Physiology in the Harvard University. Fourth Edition, Revised, 12 mo., 435 Pages with Many Illustrations. W. B. Saunders Company, Philadelphia.

This is a clear presentation of the subject suitable for schools and general colleges. The author has a happy faculty of expressing himself with scientific accuracy without the use of many complex terms.

The chapter on the hygiene of the nervous system is of exceptional interest.

One finds that each chapter insensibly leads him on to the next, in easy stages, so that the entire book is as easy to read as a novel.

Because of the peculiar style it does not resemble the usual dry disconnected type of ordinary text-book and will, therefore, appeal to both the student and the teacher.

GRAY.

DR. RAYMOND F. C. KIEB APPOINTED HEAD OF DEPARTMENT OF CORRECTION

Dr. Raymond F. C. Kieb, superintendent of Matteawan State Hospital, was appointed State Commissioner of Correction by Governor Smith on February 10, 1927. The new department of which Dr. Kieb becomes the head takes over the functions formerly exercised by the Department of Prisons, the Prison Commission, the Probation Commission and the Parole Board.



Dr. Kieb's record shows him to be exceptionally well fitted for the responsibilities of his new position. He is a native of Lowville, Lewis County, New York. He graduated from Cornell University with the degree of A. B., in 1902, and from the Cornell University Medical College in 1904. The same year he accepted the position of physician in the New York City Charities Department and was assigned to the Randall's Island hospitals. The following year he went to the Matteawan State Hospital as medical interne, was soon promoted to assistant physician and continued in this work until he was appointed first assistant physician at the Dannemora State Hospital in 1910. After oc-

cupying this position about three years he became medical superintendent of Matteawan State Hospital June 6, 1913. His administration of this institution for 13 years has been notably successful.

He is a member of the American Psychiatric Association, the American Prison Association, the American Medical Association and of many State and local organizations. In 1925, he was appointed by President Coolidge a national delegate and by Governor Smith a state delegate at the International Prison Congress held in London.

DR. HARRIS DIES

Dr. Isham G. Harris, who had been superintendent of Brooklyn State Hospital since August 1, 1916, died at his home at 157 Westminster Road, Brooklyn, April 21, 1927. He had been ill for nearly a year but was not confined to his bed until about two weeks prior to his death. Funeral services were conducted at his home Sunday, April 24, at 2:30 p. m.

A review of Dr. Harris' life and work will appear in the July issue of the *QUARTERLY*.

DEATH OF WALTER B. JAMES

Dr. Walter B. James, a distinguished physician of New York City, and former member of the State Hospital Development Commission, died at his home in New York, April 6, 1927, from heart disease. The following fitting tribute to the work of Dr. James appeared in the New York Herald-Tribune of April 10.

"Personality and intellect were united in a rare and happy balance in the stalwart figure of Dr. Walter B. James. His simplicity and strength served one of the foremost medical talents of his time. Both as a heart specialist and in the diagnosis and treatment of tuberculosis, he ranked among the leaders. Through his personality he brought this rich professional equipment to bear upon medical progress in the broadest range of activities. He was a great teacher, one of the most inspiring the city has known. With broadening scope in his later years, as president of the Academy of Medicine, as trustee of Columbia University and in the forefront of the great creative enterprise that is rearing the medical center on Washington Heights, he served his community with the highest gifts of organization and leadership. His labor was varied, indefatigable, unselfish. He carried forward the work of the Trudeau Sanatorium at Saranac. He served for a generation as trustee of the Tribune Fresh Air Fund. The American Museum of Natural History counted him one of its most faithful and understanding trustees. His was an extraordinarily rounded career of expert and devoted labor. Age could not cloud his vision or close his mind. He died as he lived, eyes open to the future, eternally young."

THE PINEL CENTENARY

Exercises commemorative of the life and accomplishments of Pinel, the distinguished French psychiatrist and humanitarian, to be held in Paris, May 30 to June 1, 1927, have been completed. An outline of the approaching exercises was prepared by the Congress of Alienists and Neurologists of France and French-speaking colonies held at Geneva on August 2, 1926.

The honorary committee is constituted under the patronage of the President of the French Republic and is headed by the Minister of Hygiene and Labor. It comprises in its membership the most illustrious neurologists and psychiatrists as well as many high officials of France and its numerous colonies. The Committee of Arrangements of the Société Médico-Psychologique is headed by Dr. Semelaigne. The commemorative exercises on the first day consist of meetings at La Salpêtrière, where a service of honor to the statue of Pinel will be held; a meeting of the Société Médico-Psychologique a meeting at the Sorbonne under the presidency of the Minister of Hygiene and Labor; on the second day a meeting of solemn commemoration at the Academy of Medicine of the death of Pinel and of the birth of Vulpian; also a banquet to foreign delegates.

NOTES

Homer Folks has been elected an Associate Fellow of the New York Academy of Medicine, in recognition of his services in the field of public health.

Governor Alfred E. Smith of New York, was awarded the Better Times Medal for distinguished social service at the annual luncheon of the Brace Memorial Newsboys' Lodging House in February, 1927. The presentation was made by Homer Folks.

President John A. Lapp of the National Conference of Social Work, is quoted as saying that there are more than 900,000 persons alive today in the United States who would be in their graves but for the preventive work done through public health agencies during the past 25 years.

Dr. George H. Kirby, Director of the Psychiatric Institute, has been appointed Professor of Psychiatry at Columbia University, to take effect July 1, 1927. Dr. Kirby, since 1917, has been Professor of Psychiatry at Cornell University Medical College. Dr. Kirby sailed for Europe on April 23, 1927, and expects to spend several months studying in various neuropsychiatric clinics and hospitals.

Motor busses were recently used in the State of Illinois in the transfer of 100 patients from Kankakee to the Peoria State Hospital. Four busses were used and two nurses accompanied the patients. The trip was made without accident or untoward occurrence. The use of busses for this purpose whenever practicable will prove a great convenience to the hospitals and will be more comfortable and enjoyable for the patients.

The Syracuse State School will conduct courses in industrial arts, mental hygiene and special class methods during the summer of 1927. The courses offered have been approved by the State Education Department and will receive credit by Syracuse University. Inquiry concerning the courses should be sent to Dr. O. H. Cobb, Superintendent, State School, Syracuse, N. Y.

The Publicity Committee of the New York State Department of Mental Hygiene is issuing a series of Mental Hygiene Leaflets for free distribution throughout the State. Leaflet No. 1 is entitled "Your Emotions" and is an abstract of a radio talk by Commissioner Frederick W. Parsons; No. 2, which deals with "Behavior Patterns," was contributed by Dr. Richard H. Hutchings, superintendent of the Utica State Hospital; Number 3, on "Accepting Life," was written by Dr. Horatio M. Pollock, director, bureau of statistics.

A special Advisory Committee is being appointed by the New York State Committee on Mental Hygiene to serve in connection with an intensive study of the incidence of mental diseases in New York State being undertaken by that committee in cooperation with the State Department of Mental Hygiene. The following psychiatrists and statisticians have been asked to serve on this Advisory Committee: Dr. Frederick W. Parsons, Dr. Frankwood E. Williams, Dr. Horatio M. Pollock, Dr. Louis Casamajor, Dr. George H. Kirby, Dr. C. Floyd Haviland, Dr. Mortimer W. Raynor, Miss Edith M. Furbush and Dr. William L. Russell, ex-officio.

Mr. Raymond G. Fuller, until recently director of the Helen S. Trounstrine Foundation in Cincinnati, who has had extensive experience in research work, has been appointed as director of the special study.

Dr. A. S. Hershfield was appointed by Governor Small state alienist of Illinois on February 16, 1927. Dr. Hershfield graduated from the Northwestern University School of Medicine in 1906. Since graduation he has specialized in nervous and mental disease. From 1910 to 1915 he was instructor in these diseases at the University of Illinois. From 1915 to 1917 he occupied the chair of nervous and mental diseases at Loyola University. Following this he was appointed neurologist and psychiatrist in the Chicago Department of Health. In addition to these duties Dr. Hershfield has been the attending psychiatrist at Jefferson Park and Mt. Sinai Hospitals.

The Welfare Magazine published by the Illinois Department of Public Welfare gives an interesting account of the work of the beauty parlor recently established in the Kankakee State Hospital. The account states that the women patients of the institution are given special attention in hairdressing, shampooing and facial treatment while at the same time they are receiving habit training and occupational treatment in their ward. To improve further the appearance of the patients they are dressed in modern styles and the dresses are made to fit the individual patient. The effect on the patients has been so beneficial that similar methods have been adopted at other Illinois State hospitals.

By Chapter 499 of the Laws of 1927, certain lands heretofore used by the Buffalo State Hospital will be incorporated in the development of a new site for the Buffalo State Normal School. There are about 90 acres involved. In the preparation of the bill as finally drafted many conferences were held between State and city officials, including representatives of the hospital and normal school.

The law provides for the transfer by the State to the City of Buffalo of about 90 acres now included in the Buffalo State Hospital property. The City of Buffalo will retain about 72 acres and re-transfer to the State about 18 acres for the Buffalo State Normal School.

The Society of the New York Hospital recently announced the extension of its psychiatric work. Dr. Wm. L. Russell, who for 15 years had been the medical director of Bloomingdale Hospital, has been appointed to the position of general psychiatric director. He will act as consulting psychiatrist in the clinical and educational work of Bloomingdale Hospital and will have general supervision of the psychiatric out-patient clinic at the New York Hospital. He will also cooperate with the Medical Board of the New York Hospital in advancing the psychiatric work of the institution. Bloomingdale Hospital will be under the charge of Dr. Mortimer W. Raynor, medical director, and the neuropsychiatric out-patient clinic of New York Hospital will be directed by Dr. George W. Henry.

Judge Alonzo MacLaughlin, county judge of the county court of Kings County, in a public address in the City of Brooklyn on the evening of April 5, 1927, advocated jury trial for persons under examination for insanity, and expressed his intention of renewing his efforts to secure the passage of an act requiring jury trials for the commitment of patients to State hospitals. The bill for this purpose, which was before the State Legislature of 1927, failed of passage.

This measure is opposed by the State Department of Mental Hygiene, as it is not believed to be for the best interests of the patients concerned. In many cases the publicity attending a jury trial would be humiliating to both patient and relatives and would serve no good purpose.

Under the provisions of Chapter 689 of the Laws of 1927, the City of New York is authorized to erect a sewage disposal plant on Ward's Island. In approving the bill Governor Smith said it was introduced at the request of the city authorities of New York and that for approximately 20 years the pollution of harbor waters and of the rivers flowing through such city has led to a warning from sanitary engineers and experts that the saturation point has nearly been reached. "It is said," the Governor wrote, "that unless corrective measures are promptly adopted a menace impends not only to the health of the people of the whole city, but also the health of the inmates of the hospital on Ward's Island."

Continuing the Governor said:

"From time to time commissions have been appointed by the Federal State and city governments for the purpose of studying this problem. They have agreed unanimously that prompt remedial measures are imperative if the possibility of a serious epidemic is to be avoided.

"By reason of depth of water, of tidal flow and for other reasons, the northerly end of Ward's Island has been chosen by engineers who have studied the subject, as the point at which a plant for the filtration, purification and treatment of sewage emptying into the most seriously polluted

part of the East and Harlem Rivers could best be established. It is the first step in a plan to remedy a grave situation.

"The local authorities of the City of New York give assurances that all possible sanitary safeguards will be thrown about the plant. Other similar plants in the City of New York have proven odorless, safe and not obnoxious to persons and property in their immediate vicinity."

That death rates from alcoholism and from wood and denatured alcoholic poisoning have notably increased since 1920 is the conclusion arrived at by Dr. Louis I. Dublin in a recent bulletin issued by the Metropolitan Life Insurance company.

Reported death rates among policy holders from all forms of alcoholism in 1916 were 5.4 per 100,000. In 1919 they dropped to a rate of 1.4 and in 1920 to 1.3. The trend since that time has been upward and in 1926 the rate was 4.1. The following comment relative to the data shown is quoted from the bulletin:

"The facts we have disclosed above for the industrial population, as represented by the millions of Metropolitan industrial policyholders, are, furthermore, in close agreement with those shown for the general population, up to the latest year (1925) for which data are available. The reports for the general population of the individual states are confirming, almost without exception, the findings for the wage-earning population. The conditions as to deaths from alcoholism are not restricted to any single economic class or to any limited area of the country. It is noteworthy also that the alcoholism death rate runs much higher in the general population than among the wage-earners.

"The rising alcoholism death rate in this country since 1920 cannot, in our judgment, be explained by increased consumption of 'hard' liquor as compared with wartime and pre-wartime years. The reason must lie, we think, in the greater toxicity of the alcoholic liquors which are now used so generally throughout the country. The only encouraging feature in this picture is that officials of various states, responsible for the public health, are now stirred by the situation and are preparing measures for its more adequate control."

The following important meetings will be held in May and June, 1927:

May 9-11, American Child Health Association; Washington, D. C.

May 10-12, Medical Society of the State of New York; Niagara Falls, N. Y.

May 16-20, American Medical Association; Washington, D. C.

May 30-31, The National Association for the Study of Epilepsy; Cincinnati, Ohio.

May 31, June 1-3, American Psychiatric Association; Cincinnati, Ohio.

June 4-6, American Association for the Study of the Feeble-minded; Cincinnati, Ohio.

NOTE ON YEAST THERAPY

Yeast, known botanically as *saccharomyces cerivisæ* is a simple microscopic plant, belonging to the mushroom family and reproduces itself by budding.

Fleischmann's Yeast is a special strain of *saccharomyces cerivisæ*, selected and cultivated to develop hardiness, high vitamin content and strong enzymatic power. It is grown under strict scientific control and each cake of Fleischmann's Yeast consists of millions of these tiny plants pressed together.

The use of yeast as a curative agent is not new. While several references to its use are found in the old literature the first real scientific investigation was made by Moses in England and reported in the London Lancet in 1852. Since that time, the literature of all countries contains considerable information.

About 1917 a number of investigations were carried out by several well-known physicians; and this research work under grants by the Fleischmann Company has been continued in various hospitals and colleges to date, and in fact is still going on.

Besides the above investigations, the Fleischmann Company had very thorough tests made in some physiological laboratories, where large quantities of yeast were eaten by the staff for a considerable period of time, and thorough tests showed it to be absolutely harmless.

While the chief value of yeast is in the treatment of constipation, it is also almost a specific for boils. It stimulates the appetite and corrects many of the milder gastro-intestinal disturbances. Although it is the richest available source of Vitamin B., it should not be thought that yeast is recommended solely for its vitamin content. It is due to its other properties mentioned above, that yeast is so valuable.

While it is recognized, that many cases of constipation are relieved by regular exercise, proper food, etc., the addition of yeast is really a part of the dietary treatment, and it is particularly valuable in cases that do not yield to simple measures. It is not in any sense a cathartic, and its action in producing regular elimination of waste, requires several weeks' treatment. But when normal elimination is finally established, it is usually permanent. In other words, yeast is in no sense habit-forming.

UNCOMMON CLAYS

The Count was an inveterate smoker. His cigars were made from tobacco from the Vuelta Abajo district in Cuba and he always saw to it that the fibre was long. When he lighted a perfecto he did so with the greatest care and smoked it so evenly that the ash stood by itself when the cigar was two-thirds smoked. A rather foolish, foppish person his fellow scientists considered him, although they were willing to admit that there was none who knew more about rare earths and uncommon clays than he.

One day the Count, perhaps we had better say Carl Auer, was sitting in his laboratory balancing the ash of a long cigar when an idea occurred to him—Why could he not devise a scheme for making a cone of ashes stand alone so that he could heat it until it glowed with a white heat? Just at that time he was experimenting with white clays and rare earths and had noticed that after some of these substances had been brought to a white heat they gave out a strong light. So he made a round cotton wick ending in a cone top, impregnated it with a mixture of thorium and cerium—both rare earths—and lighted it. The cotton burned up and the earths stood in a cone, which looked not unlike the clinging ash of one of his long cigars. The more he heated the cone the whiter and hotter it grew, and thus Auer invented the gas mantle. In recognition of his services the Austrian Government permitted him to become the Count of the little village where he was born—Welsbach.

As precious as are rare earths is kaolin, far from common clay, which the Chinese used in the making of their wonderful porcelains. Fine and white the sediment of granite taken from primeval seas, this super clay found its way into some of the finest works of art the world has ever known. In fact, the Chinese were so fond of it that they thought it had medicinal qualities and sometimes had it made into pills. These days one does not take kaolin pills, but one knows instinctively that some uncommon clays have a wonderful absorbent quality, which makes them especially efficient as poultices. Such is the kaolin-like earth from which Antiphlogistine is made in part. The Chinese sensed that white clay had wonderful healing properties, but here in the United States we have learned that they knew only half of the story. This uncommon clay is today doing much to relieve the ills to which flesh is heir, and has sounded the knell of venesection by making possible a bloodless phlebotomy.